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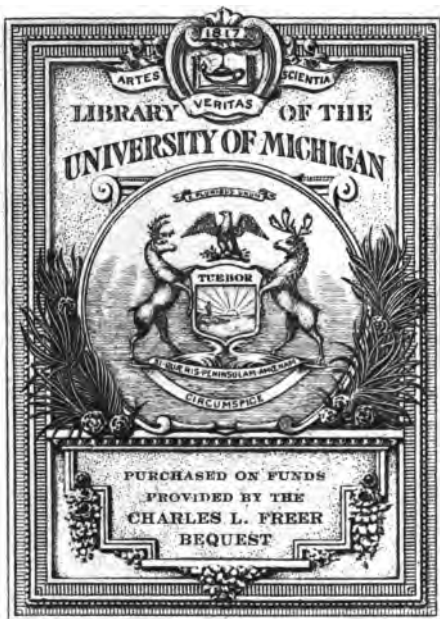
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OH, EAST IS EAST, AND WEST IS WEST, AND NEVER THE TWIN SHALL MEET

**GEOGRAPHICAL AND INDUSTRIAL STUDIES**

**ASIA**

**BY**

**NELLIE B. ALLEN**

**STATE NORMAL SCHOOL, FITCHBURG, MASSACHUSETTS**

**GINN AND COMPANY**

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## PREFACE

The aim of the writer has been to make the Far-Eastern continent of Asia mean more to the readers of this book than a collection of colored areas, a series of names, or a maze of dots and lines.

The locating of black dots and wiggly lines with no mental pictures of the real places for which they stand, and the memorizing of lists of products only to forget the country to which each belongs, is the geography of the past. Modern geography is alive. The up-to-date teacher deals with real people, real industries, real places, and real relations. The uneven lines are mighty rivers filled with craft, furnishing water for irrigation, and power for lighting and manufacturing. The black dots are large cities crowded with busy workers whose lives, homes, and occupations are as real as those by which the pupils are surrounded.

The world is bound together by ties of close relationship, boundaries are changing, and countries heretofore closed to outside nations are opening their doors to the great world life and are entering into commerce and trade.

As the United States has reached farther and farther into the Pacific Ocean, Asia has come correspondingly nearer, and our future relations with this great continent may be as close and as vital as those which at present exist between our country and Europe.

The pupils of the grammar grades should have a broad knowledge of these densely populated countries across the Pacific; a better appreciation of the skill, industry, and thrift of the peoples; a keen realization of the fact that many products which add to our daily comfort are due to the labor of Eastern nations; and a sympathetic understanding of the lives, customs, and ideals of these millions of Orientals. They should know something of those historic lands which formed the Cradle of the Race; of the vast deserts which have been as great a barrier to communication as have the mountain ranges; of those political questions which may involve great nations in war; of the influence of European nations in the East; of the lands now under their control and of the work which they are doing to develop the resources of their Eastern possessions.

The greatest continent in the world, the most densely peopled areas, and the most abundant resources are found in Asia. The attitude of our future citizens (who are at present in the schools) toward the many questions which will arise between the United States and the awakening nations of the East will be a matter of vital importance to our country in the coming years.

Because of the interest in descriptive geography, locational geography is sometimes neglected. The maps and the questions and lists given at the ends of the chapters are intended for drills to fix in mind places and facts of importance.

Thanks are due to the following individuals and firms for their valuable assistance in the shape of suggestions, criticisms, photographs, and other material: K. Asakawa, Yale University; A. B. Bacon, Oriental Rug Department,

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NELLIE B. ALLEN

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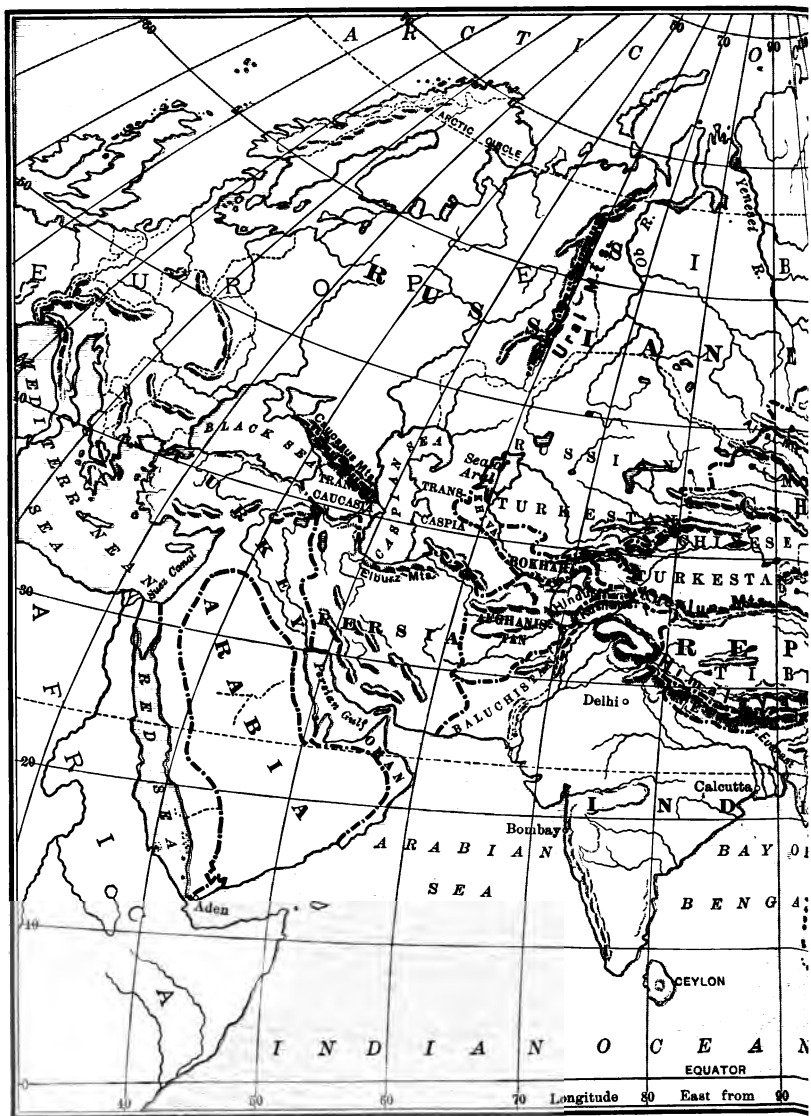
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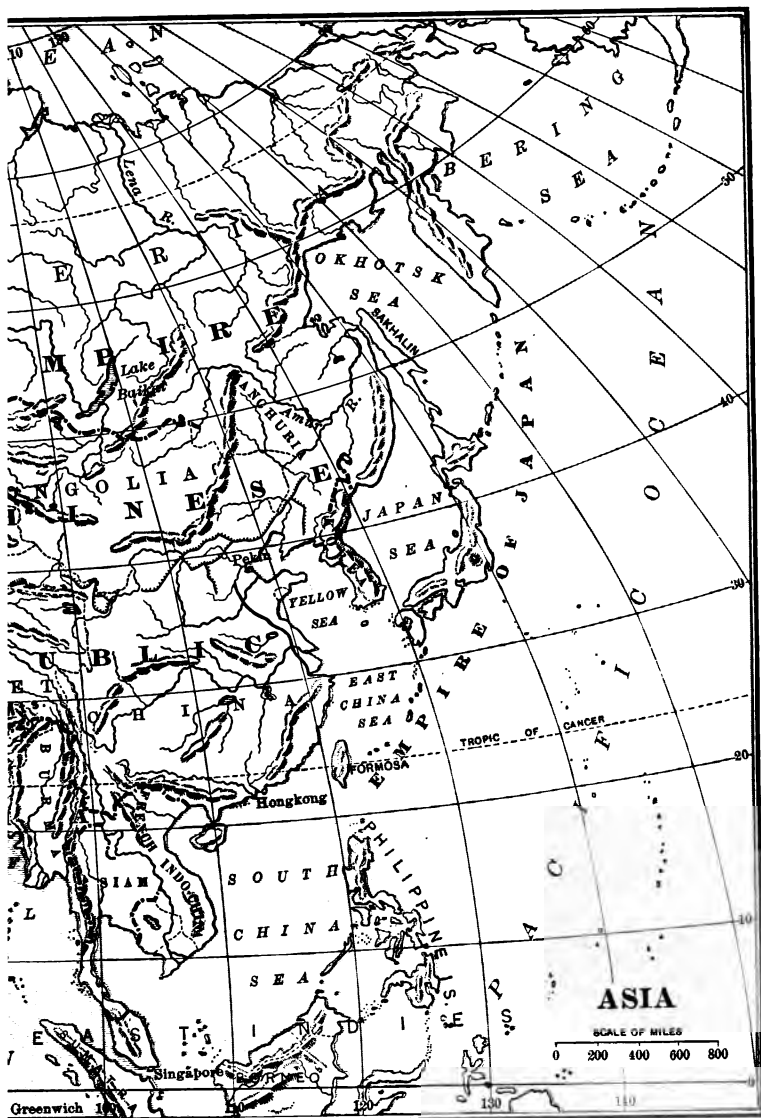
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Something is to be learned from every  
book. — *Old Chinese Proverb*











# ASIA

## CHAPTER I

### INTRODUCTION

We are going to travel in Asia, the largest continent in the world. It is larger than all the lands in the Western Hemisphere and stretches from the desolate arctic shores almost to the equator. Its northern plains are so cold as to be uninhabitable, and its vast deserts are too barren to support life, yet other parts are so crowded that there are more people in Asia than in all the rest of the world.

The loftiest mountains on earth, the Himalayas, lie in the southern part of Asia. They are only a few degrees from the equator, yet they are so high that their heads are always covered with snow. Just north of this "roof of the world" are great stretches of desert land where for miles no life can be found. To the east and south are immense plains so rich, so well watered, and so fertile that more people live on them than on an equal area in any other continent.

Asia contains not only the highest mountains, the greatest deserts, and the most thickly peopled areas to be found anywhere in the world, but it has also some of the longest rivers. These flow northward from the great deserts, eastward across the wide plains, and southward from the lofty mountains. Some of them, winding slowly through fertile

fields, are filled with boats carrying food and clothing products to crowded cities. Others, rushing down steep slopes, overflow fields and towns, flood crops, and drown people. In the future this tremendous power, which now destroys life and property, will be harnessed and made to move the machinery in great factories, turn mill wheels, and light crowded cities.

Make a list of the twenty-five largest cities in the world, and you will find that more than a third of them are in Asia. Besides these there are dozens of others each containing more than a hundred thousand inhabitants. They are queer cities with narrow streets, low houses, crowded bazaars, veiled women, turbaned men and boys, water carriers, street barbers, and human steeds and burden-bearers.

Some of the largest and fiercest animals of the world live in Asia. We shall see huge elephants carrying heavy lumber and dragging small plows. We shall hear dreadful tales of the terrible man-eating tigers, which are sometimes bold enough to enter villages and carry people off. We shall see snake-charmers playing soft music for their ugly pets, and we shall learn what great numbers of natives die each year from snake bites.

Asia is big in many respects, and it is as old as it is great. It is the cradle of the race. From western Asia the earliest peoples migrated eastward into China, southward into Africa, and westward into Europe. We shall see relics of these old civilizations, we shall enter temples in which people have worshiped for thousands of years, and we shall travel over deserts where to-day no life is found, but where piles of stones, crumbling ruins, and sand-choked canals tell us that, ages ago, great cities flourished there.

In our present-day civilization we use many things for which we are indebted to these people of ancient times. From their queer old libraries, made up of carvings on sun-dried brick and stone, we have learned much concerning these early nations. To them we owe the invention of



FIG. 1. WE SHALL SEE HUMAN BURDEN-BEARERS

the alphabet, of printing, of gunpowder, and of silk manufacture. Our mathematicians can build on the foundation they laid, our astronomers can rely on many of their calculations and predictions, and our engineers can build no greater works than the irrigation systems, canals, and giant walls which, for thousands of years, have been the wonder of the world. Some of their industries also are such that no Western nation has ever equaled them. No such

wonderful rugs, soft, lasting dyes, delicate embroideries, and fine, dainty carvings are made in any other continent.

Asia is the birthplace of the great religions of the world. It is the home of Buddhists and Brahmans, who make up



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FIG. 2. WHERE TO-DAY NO LIFE IS FOUND THERE ARE RUINS OF LARGE CITIES, BEAUTIFUL TEMPLES, AND IRRIGATING CANALS

about a third of the human race, and of millions of Moham-medans, who are scattered in every country. In the western part of the continent we shall travel in lands where the scenes took place which are told of in the Bible stories.

Asia is as rich as it is great and old. It is rich not only in the skill and industry of the people, but in material resources — in stores of minerals, in great rivers, in limitless forests, and in fertile plains. You remember that it was to obtain the riches of eastern Asia — the gems, the spices, the gums, and the rich silks — that Columbus set out on his search for India. His theory was correct, and if North and South America had not lain in his way, he could have reached India by sailing west as easily as Vasco da Gama, the great Portuguese explorer, did by traveling east.

In the early days of trade, quantities of goods reached Europe by sea, river, and overland routes. The Italian cities of Venice and Genoa were the centers of this commerce, and eastward-bound vessels sailed through the Mediterranean, carrying metal goods, wine, glassware, and woolen and linen cloth. These goods were taken overland to cities in western Asia. To these centers merchants, bringing silk, cashmere cloth, perfumes, gems, and spices, traveled hundreds of miles on weary caravan journeys. Venice and Genoa had become the greatest seaports of the world, and the commerce of the East had grown to immense proportions, when it came suddenly to an end. The Mohammedan hordes from the desert regions of Asia poured over the lands to the west, conquering and pillaging them. Every Christian was an object of attack. The Mohammedans, scouring the Mediterranean, captured and destroyed the ships of Christian merchants, robbed their caravans, and closed their trade routes through western Asia. It was at this time that European nations began their search for a water route to India and the East, with the result that Columbus discovered a continent and

Vasco da Gama rounded the Cape of Good Hope, crossed the Indian Ocean, and reached what is now the great city of Calcutta.



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FIG. 8. YOU WILL BE OBLIGED TO DRINK  
WATER OUT OF A SKIN BAG

If you were to journey through this wonderful land, you would hear more languages than you ever knew existed, you would smell more bad odors than ever before entered your nostrils, and you would have to struggle with more hard names than you ever yet tried to pronounce. You would have to do many queer things and to get along with few comforts. In entering a house you would remove your shoes but keep on your hat. In some countries you would squat on your heels like the Hindus, and in others you would sit cross-legged like the Turks.

The girls would probably go barefooted, but they would keep their faces veiled and would go about in public very



little. They would enjoy few picnics or merrymakings, but would spend much of their time at home. The boys might go to school, but while there they would make a great deal of noise by studying aloud. You would live in houses which have no chairs or tables, eat without knives or forks, and travel much of the time where there are no railroad trains or electric cars. In some countries you would sleep by day and travel by night. You would have to endure the awful heat of the torrid zone and the biting cold of northern lands and of high mountain regions. You would be obliged to drink lukewarm water out of a skin bag, be blinded with dust in a desert sandstorm, and be sore in every bone of your body from the motion of the camel which carried you.

We must lay aside for a time our Western ideas and try to see with the eyes of the far-seeing Japanese, to think with the mind of the brilliant, thoughtful Hindu, and to toil with the hands of the hard-working Chinese. As we become better acquainted with these people, we realize what a great future lies before them. There are such numbers of them, many of them are so intelligent and so industrious, their land is so big and so rich, that, when they are once started on the road to progress, no one knows how far they will go. They are our neighbors across the Pacific; our trade and commerce will increase as they progress, for they need many things which we produce and manufacture and which we shall be glad to send them in exchange for the goods for which the countries of Asia are noted. In the future we shall be closely connected with these people of the East, and the more we know of them and their land the better friends we shall be.

## TOPICS FOR STUDY

## I

1. The great size of Asia.
2. Surface and drainage.
3. Asiatic cities.
4. The animals of Asia.
5. Early peoples and cities.
6. The religions of the East.
7. The resources of Asia.
8. Ancient trade routes.
9. Columbus and Vasco da Gama.
10. Strange sights and customs.
11. The future of Asia.

## II

1. Name the continents in the order of their size. Which is the most densely populated? the most thinly settled?
2. Sketch a map of Asia. Show the countries and the surrounding waters.
3. Name the rivers of Asia that flow north; east; south.
4. Tell the waters through which Vasco da Gama sailed on his voyage to Calcutta.
5. What great undertaking of the present time will have as great an effect on the trade routes of the world as the closing of the Mediterranean and Red seas by the Turks had on ancient routes?

## III

Be able to spell and pronounce the following names. Locate each place and tell what was said of it in the chapter.

Himalaya Mountains	Venice
Arctic Ocean	Genoa
Indian Ocean	Calcutta
Pacific Ocean	India
Cape of Good Hope	Portugal
Mediterranean Sea	China





## CHAPTER II

### THE LAND OF GREAT WATERWAYS

An old Chinese proverb says, "One seeing is better than a thousand telling you of it." This is true of any strange land, but for us it is especially true of China, as that country is very different in many ways from the United States, and the customs of the people are often the opposite of ours. Many of them seem to us very queer indeed, but we must remember that our manners and customs seem just as queer to the Chinese. In greeting a friend, a Chinaman shakes his own hand instead of that of the other; when in mourning, he dresses in white rather than in black. The finest present which a Chinese boy can give his father is a coffin; he would like this gift better than any other, and would proudly point out its beauties and describe its merits to his friends. Instead of building fires in the winter to warm their houses, the Chinese people put on more clothing, and thus increase their size as the weather grows colder. They become smaller again in the spring as layer after layer is discarded. They read the long, vertical street signs from top to bottom instead of from left to right, and begin at what we should call the last page of a book to read it through.

Chinese girls do not usually go to school, though to-day girls' schools are being slowly introduced. Those which the boys attend would seem very queer to us. The pupils

study aloud and stand to recite with their backs to their teacher. When you are puzzled in school over some of the hard words in your lesson, you sometimes scratch your head, but a Chinese boy kicks off a shoe and scratches his foot.



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FIG. 4. THEY READ THE LONG, VERTICAL STREET SIGNS FROM TOP TO BOTTOM

When the teacher asks the pupils' ages, they reckon from New Year's Day, as all the Chinese regard that as their birthday. If a child is born only two or three days before the end of the year, he is considered two years old on the first day of the new year. His first birthday was the day on which he was born, but his second and all his succeeding birthdays are supposed to be on New Year's Day.

This queer land is a very old one. When America was still undiscovered and when Europeans were only rude barbarians, the Chinese were keeping historical records. They have seen many ancient countries — Persia, Egypt, Greece, and Rome — rise and fall. They claim the honor of inventing paper, silk, gunpowder, and the art of printing,

and two thousand years before the birth of Christ they were so skilled in mathematics and astronomy that they could predict eclipses.

China is shut off from other countries by a chain of highlands and plateaus extending along a frontier line of nearly six thousand miles. Her water front faces the largest ocean on the globe, the very size of which prevented communication across it for centuries. Thus hemmed in by mountains and water, China worked out her civilization, which, because of her isolation, was different from that of any other country. Contrast these conditions with those under which European nations developed. They received help from one another, from the countries of western Asia, and from Egypt.

Whenever we read of the strange customs or the queer ways of our neighbors across the Pacific, we must remember that, without help from their neighbors, without inspiration from other more highly developed peoples, they built up a civilization superior to that of any other people on the continent of Asia, and formed a united country which has endured for more than four thousand years.

This is all the more wonderful when we remember what a large area is included in this Eastern land. Next to the Russian and British dominions the Republic of China is the largest country in the world. It stretches farther north and farther south than the United States, and there is more difference in climate between its northern and southern provinces than between Minnesota and Louisiana. There is as great a contrast between the people of the extreme north and those of the semitropical south as between Italians and Norwegians. A Chinese of Manchuria is taller

than his brother in the south, and his language is so different that he can no more understand his southern countryman than a Frenchman can understand a Swede.

There are more people in the dominions of China than in North America, South America, Africa, and Australia. In parts of the country they are so crowded that the land is more thickly settled than Texas would be if it contained all the people of the United States and half as many more.

"The Land of Great Waterways" is a very appropriate name for this Eastern country, for it has a greater length of rivers and canals, more boats, and a larger water population than any other country in the world. By looking on the map you can see that it is made up largely of the valleys of several long eastward-flowing rivers and the highlands between them. The largest of these great waterways rise in the lofty mountains which separate China from the countries to the west, flow down the steep slopes, rush through narrow gorges, and wander across wide plains which they have built up, to the Pacific Ocean and its arms.

The most northerly of these great streams is the Amur, which, because of its dark waters, the Chinese call "the river of the black dragon." The Amur is about twice the length of the Columbia, which is a few degrees farther north on the opposite side of the Pacific Ocean. For many miles the Amur forms the boundary between Russian and Chinese territory. It is ice-bound from November to April, and for this reason, and because of the wilderness through which it flows, it is not as useful as its largest tributary, the Sungari, which waters the most fertile part of Manchuria.

Nearly as far south as San Francisco is the mouth of the Hwang River, or the Hwang Ho, as it is sometimes called.





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**FIG. 5. CHINA HAS A LARGE WATER POPULATION LIVING IN QUEER  
LITTLE BOATS CALLED SAMPANS**

The northern Chinese word for river is *Ho*, while in the south the word *Kiang* is used, and the great Yangtze River is sometimes named the Yangtze Kiang. The Hwang is nearly as large as the Missouri, but on account of its swift current, its sand banks, and its shifting channel, it is of little use to navigation. Its tremendous water power will in the future be of immense value to China in developing her manufacturing industries. By means of it enough electricity can be generated to light all the cities in its valley and to run all the silk mills in the country.

The name *Hwang*, which means "yellow," was given to this great waterway on account of the color of its water. Not only is the stream loaded with yellow silt, but the land through which it flows, the houses, the fields, and the crops are covered with yellow dust, and the sea into which it flows is of the same color.

This peculiar-looking soil, supposed to have been brought by the winds from the deserts in the north, is called loess. In some places gorges hundreds of feet deep show perpendicular walls of it. Rivers have cut deep cañons in it and, as highways often follow river valleys, many of the roads lie in these gorges. In parts of the Hwang valley one may look for miles over vast yellow stretches of land and see no houses or roads. The houses are caves in the loess, and the roads sometimes lie many feet below the level of the country.

An area larger than the entire country of France, extending from north of the Hwang nearly to the Yangtze River, is covered with this peculiar yellowish soil. It is so productive that in spite of the centuries of constant cultivation, it has not lost its fertility, but is still capable

of supporting dense populations, and this great plain of eastern China literally swarms with people.

Another name often given to the Hwang River is *China's Sorrow*. In a thousand years it caused the death of more people than were slain during the same time in all the great wars of the world. When the snows melt on the mountains, the mighty river becomes swollen with floods and spreads out over the plain, destroying crops, villages, and people for miles around and leaving behind it, as it subsides, disease, famine, and suffering. Because of these floods the river is diked for long stretches, and thousands of men are employed in keeping the dikes in repair. As the stream deposits more and more sediment, its bed and the level of its waters are gradually raised and the dikes must also be made higher. In parts of the Hwang valley, as in places on the Mississippi, the water is higher than the surrounding plain, which is therefore more easily flooded when the river breaks through the dikes.

During its flood seasons the great river has many times left its channel and sought a new course over the plain, sweeping away, in its mad rush for the ocean, the towns and cities which lay in its path. During one of these changes a million people lost their lives, and hundreds of busy, crowded towns and villages were wiped out of existence.

Going southward over the fertile plain, we come to the Yangtze River, the greatest of all Chinese waterways. In its basin live nearly twice as many people as are found in the United States, making it the most densely populated river valley in the world. From its source in the lofty highlands of Tibet the Yangtze comes dashing down steep

mountain sides, whirling through deep gorges with vertical sides hundreds of feet high, winding through smiling valleys between green hills, and finally meandering slowly across the fertile plain to the sea. There it discharges such quantities of silt as to discolor the blue water for more than a hundred miles from shore.

We will start on a trip up the Yangtze at Shanghai, a city about the size of St. Louis. It is one of the largest cities of Asia and an important industrial and commercial center. We should know that it is a great world port from the number of vessels which crowd its harbor. There are great lead-gray British cruisers side by side with Chinese gunboats; there are big black merchantmen displaying the colors of many nations — England, Germany, France, Austria, and Japan; and, best of all, we see the Stars and Stripes floating from a vessel from the United States. Nearer the wharves there are countless Chinese junks with reddish-brown sails, and rows upon rows of queer little boats called sampans, each with its small round roofing of matting and its swarm of yellow children. Let us go up from the wharves into the old Chinese city. How queer it all is! Everything which to our Western minds a great city should contain, such as fine streets, smooth pavements, sidewalks, large business blocks, policemen, cabs, and cars, is lacking.

Through the narrow gate in the great wall which surrounds the city a crowd of Chinese are pushing, jostling, crowding, and shouting. The water carrier balances his dripping pails on a bamboo pole over his shoulder. Other coolies carry in a similar way their ill-smelling loads of the city sewage. Should you like to ride in that curtained chair borne on long poles by coolies, who yell a warning

for the people to make way as they approach, or should you prefer the jinrikisha, that little two-wheeled affair with a man instead of a horse between the shafts?



FIG. 6. THERE IS A WHEELBARROW WITH A PASSENGER ON ONE SIDE AND ON THE OTHER A LIVE HOG

Mother Goose must certainly have had China in mind when she wrote,

The streets were so bad and the lanes were so narrow  
I was forced to bring my wife home on a wheelbarrow.

We see in the streets hundreds of these queer Chinese vehicles. There is one with a passenger on one side and on the other a live hog, whose piercing squeals add to the din around us. In the crowd there are coolies with baskets of vegetables swinging from slender poles over their shoulders, and others with huge packing cases on their backs. As we linger to watch the people we see all kinds of heavy loads and an immense amount of merchandise carried, but we do not see a horse, a mule, a donkey, or any kind of four-footed beast of burden, nor shall we find any in our travels through a large part of the country. In all this great land there are few highways of any length which an American would think for a moment of dignifying by the name of *street*. With the exception of some in Peking and in the foreign settlements of the large cities, the broadest streets are not more than eight or ten feet wide, while in the country regions the roads are mere paths. In the northern part of the country the highways are just wide enough to accommodate the mule teams and pony carts which are used there. In the south, wheelbarrows which carry both passengers and freight are the largest conveyances; everything not carried in these is borne on the backs or shoulders of men.

We manage to squeeze through the crowded gate of Shanghai and find ourselves on a street not much wider than some American sidewalks. Our sight-seeing is beset with difficulties. We are so interested and amused by the strange scenes on every hand that we are nearly knocked down by a chair runner. Stepping quickly aside, we almost fall into a pile of garbage which lies in our way. There are no sidewalks in the narrow streets of Chinese cities,

no modern methods of street cleaning, no good system of sewerage. In the larger cities street cleaners pick up the



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**FIG. 7. BUT ALTHOUGH, AS WE LINGER TO WATCH THE PEOPLE, WE SEE ALL KINDS OF HEAVY LOADS, WE DO NOT SEE A FOUR-FOOTED BEAST OF BURDEN**

refuse which is thrown into the streets. The farmers are very glad to get this material, which they use to fertilize the land on their little farms. In most Chinese cities

there are no watering systems. Coolies bring the water in pails from canals, rivers, or, in some cases, from wells, and the constant slopping keeps the streets in places



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FIG. 8. MUCH OF THE FREIGHT IN BOTH CHINESE AND JAPANESE CITIES IS CARRIED ON THE BACKS OR HUNG ON POLES FROM THE SHOULDERS OF COOLIES

continually muddy. There are no city lighting plants. People who are obliged to go out in the evening carry lanterns, as it would be difficult in the darkness to avoid the mud, the holes, and the piles of filth.



The shops which line the streets in the Chinese quarter of Shanghai are very different from our large department stores, where one can buy anything from a handkerchief to a kitchen range. The Chinese shops are low, one-story buildings with no windows or doors. They are closed at night by shutters, and when these are taken down in the morning, the whole interior is open to view. In many stores no goods are displayed, but when purchasers appear, the merchant brings out rolls of costly silk, priceless bronzes, delicate lacquered ware, dainty china, or whatever line of goods he may have to sell. He asks much more than the goods are worth, and if one is wise he will offer less than he intends to pay. After a discussion over the ever-present cups of tea a bargain will finally be struck.

We laugh to see a barber plying his trade in the open street, but it is a common sight in this strange land. Except for a round place under the cap, where the hair was allowed to grow for the queue, the Chinese have worn their hair closely shaved for two hundred and fifty years. As our fashion of wearing the hair is being generally adopted, the number of barbers in the streets of Chinese cities will be considerably lessened.

See those filthy beggars with dusty rags just covering their bodies, which are repulsive with disease and sores. Some blind ones among them find their way by walking with their hands on the shoulders of the one in front of them. China is a land of beggars, who make a trade of their infirmities. In some cities they band together and go from shop to shop, asking for cash, as the small coin of China is called. Everyone gives them a mite, not freely, perhaps, but because, if they refuse, the beggars will take

their stand in front of the store and so drive away all customers, for no one wishes to come near such filthy creatures.

All classes of people throng the streets. On the corner there is a juggler performing some wonderful sleight-of-hand tricks before an admiring audience. A dignified Chinese in his silken gown draws close to the shop counter to avoid the coolie with his pails of filth. A fish dealer hurries past, calling to us to get out of the way. As he stops for a customer we take a peep at the fish wiggling in the pails of water which hang from his bamboo pole. The customer selects his fish, the dealer produces a small board, and in the twinkling of an eye the fish is laid on it, killed, cleaned, and delivered to the waiting purchaser.

We should know from his long gown, his proud, thin face, and his air of superiority that this person passing us is a scholar. In no country in the world is learning more highly regarded than in China, and though a scholar may be very poor and his dress rusty and threadbare, yet he is treated with great respect by all who meet him. That coolie coming at a steady trot with great bundles of brush for fuel hanging from his pole takes up more than half of the street, but at his cries everybody goodnaturedly makes way for him to pass.

We are very glad to leave the noise, the dirt, and the smells, and go outside the walls of Shanghai to the part of the city where the Europeans and Americans live. The foreign settlement is as different from the Chinese city as the slums of New York are different from the Fifth Avenue shops and the residences of the millionaires. In the foreign settlement are electric lights and cars, broad streets, parks, and pleasant residences. The natives of

Shanghai have seen for years the improvements which foreigners have made in their part of the city, but few, if any, have as yet been introduced into the Chinese quarters.

Shanghai is situated on a small stream which enters the Yangtze Kiang near its mouth. At the busy wharves we



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**FIG. 9. THE FOREIGN SETTLEMENT OF SHANGHAI IS AS DIFFERENT FROM THE CHINESE QUARTERS AS THE SLUMS OF NEW YORK ARE DIFFERENT FROM FIFTH AVENUE**

will take a fine large steamer for our trip up the great river. It is hard to realize that we are on a river at all, as for some miles no land is visible on either side.

We should like to take a coasting steamer or a house boat for a trip to Hangchow just at the head of the wide

mouth of the Yangtze, for it is so beautifully located, overlooking the river, the sea, and a lovely lake, that an old Chinese proverb says, "Above is heaven and below is Hangchow."

For miles around, the mulberry trees tell us that we are in the center of the silk region. The trees are planted in every possible place—along the canals, on the ridges separating the fields, and in great orchards. There are also many nurseries where young trees are raised. If we were to explore the city, we should find many rude hand looms in the little houses, thousands of power looms in the factories where silk is woven, and many fascinating shops where it is sold.

Hangchow is situated at the southern end of the Grand Canal, which stretches northward to Tientsin and is continued by the Pei River to Peking. This canal, six hundred miles in length and connecting the waters of the two greatest Chinese rivers, is one of the longest canals in the world. Enormous sums have been spent in building and maintaining this great waterway, which is made up largely of small streams and lakes, with artificial connections, and which seems more like a winding river than a canal. Formerly this water highway through the heart of the densely populated country was of immense importance and was crowded with junks carrying rice, tea, silk, and other goods to Peking, the capital of China. Much of this traffic is now carried on by sea to Tientsin and thence by rail or water to Peking, and the canal in places is so out of repair as to be unnavigable; yet it serves to tell us of the industry and marvelous development of this great Eastern nation which, centuries ago, could plan and build such a waterway.

Hundreds of canals branch off from the Grand Canal and from the rivers of the region. These subdivide into still smaller ones, which branch yet again into ditches and creeks. It is said that in the low delta plains of China there is a canal for every farming area of forty acres. No other country in the world has such an immense number of waterways intersecting so large an area. From an air-ship we could get a good view of the network of canals and of the fertile fields, covered with rice and millet, cotton plants, and mulberry trees, lying between them. Even if the scattered villages were not visible, we could tell their location by the willows and elms clustered about them. Elsewhere the plain is bare of woods. Near each village is a narrow creek or canal which winds far inland through the rice country. Curious-looking craft — junks, sampans, fishing boats, and house boats — fill these waterways so that it seems impossible that any boat can ever free itself from the tangle; yet with much shouting and confusion the boats finally separate from the crowd and slowly start on their different journeys.

Besides serving as highways, the canals are useful to the Chinese in many other ways. They serve as hatcheries in which to breed immense numbers of fish, duck farms are found everywhere along them, and a bulb, known as the water chestnut, is raised in them in great quantities and used by the people as a cheap food. The farmers dredge the canals for the mud which accumulates, and spread this on their fields, thereby serving the double purpose of enriching the land and keeping the canals in good condition. Baskets are woven from the grass and reeds which grow in and around the canals. The most important way, however,

in which the canals serve the people is by carrying the enormous amount of traffic which is necessary in this densely populated country. So important are they in this respect that the Chinese would be as helpless without their canals as we should be without our railroads.

Continuing our trip up the Yangtze, we come to Nanking, the old capital of China and at one time the largest city in the world. The word *Nanking* means "southern capital," in contrast with *Peking*, which means "northern capital." The city itself lies five miles away, and from the river one sees only the encircling walls and the modern forts and barracks which overlook the stream.

Your grandmothers will perhaps remember using for their dresses a strong cotton cloth called nankeen. As you may imagine from its name, this cloth was made originally in Nanking, where cotton manufacturing is still an important industry.

China is the land of fans. In the southern portions especially, everyone — the policeman on his rounds, the soldier on guard, the coolie in the ricksha, and the lady in her apartments — carries a fan in warm weather and uses it constantly. Nanking is a center of the fan industry, and thousands of people there are engaged in making the folding fans such as we use, as well as the coarse, strong palm-leaf fans so necessary for the comfort of the Chinese. This latter kind is also made in immense numbers in and around Canton.

Perhaps you have heard of or have used rice paper, a dainty, thin material on which delicate painting and printing is done. It is made, not from the rice plant, but from a reed which grows in the swampy lands. Nanking is the

chief center for the making of this paper and also for the manufacture of an excellent quality of India ink.

Until one travels on the Yangtze one cannot realize what an immense river it really is. Six hundred miles from its mouth it is a mile wide, and even a thousand miles from the ocean it is fully three quarters of a mile from shore to shore. Many large tributaries, canals, and creeks open up the country around and make it possible for everyone to reach the river, which is the only outlet for some of the richest farming lands in western China. The lines of junks which crowd the stream at every town and city tell us of the vast amount of goods which are carried on these waterways.

The Yangtze is not beautiful, for it is yellow with the silt that it carries. During its summer floods it deposits this silt on the land and drops it in enormous quantities in the sea at its mouth; because of this annual fertilization of its valley and the careful cultivation which the farmers give to it, the soil yields abundant harvests of rice, vegetables, and grain. These great crops are necessary to feed the immense numbers of people who live in the Yangtze valley.

A little more than six hundred miles from the ocean, just where the Han River enters the Yangtze, is Hankow, one of the great centers of the republic and the most important tea market of the country. This city is the largest distributing center in China, and as we notice its location we can see the reason for this. It is the southern terminus of the Peking-Hankow Railroad, on which great quantities of goods are shipped to and from the north. An enormous amount of freight is brought on the Yangtze from the east and from the west, to be reshipped up the Han River

and thence, by its branches and intersecting canals, through the region to the north. For miles along both rivers lie the junks which are engaged in this carrying trade. The city, inclosed by walls, lies near the river, and farther away along the creeks and canals are the crowded suburbs. We shall find but little paving in the narrow, dirty alleys which serve as streets and which are consequently worn into deep ruts by the wheels of the thousands of heavily loaded wheelbarrows constantly passing and repassing.

At Hankow we must leave our large, comfortable steamer and change to a smaller one for our trip of five or six days to Ichang, the head of navigation on the Yangtze. On the way we meet many boats filled with raw cotton, raw silk, wheat, and the ever-present rice and tea. So much of the last-named product is carried on the Yangtze that it is sometimes called the River of Tea.

We see also many timber rafts come floating down with the current, and sampans lashed together, yet kept apart by platforms built between them. These are loaded with the great reeds which line the bank for hundreds of miles. Many people along the river are engaged in cutting and transporting reeds, which are used for roofs, for fences, for fuel, and, plastered within and without with mud, for the walls of houses.

The fuel question is a serious one in China on account of the scarcity of wood. Roots, straw, leaves, weeds, manure, everything in fact which will burn and which is not needed for other purposes, is used for fuel. In the cities the hot-water peddler is well patronized, as it is cheaper to buy of him what is needed than to use the precious fuel to heat water at home.





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**FIG. 10. COOLIES UNLOADING TEA AT HANKOW, THE GREAT TEA  
MARKET OF INTERIOR CHINA**

In parts of its course the Yangtze is protected by huge dikes, over which we can see nothing except the carved roof of a temple as we pass some city or town. These places, usually walled and fortified, are dirty and unattractive. The refuse is thrown into the river and accumulates in great heaps which at low water give off odors better imagined than described. Filthy beggars, black pigs, and dirty dogs wander over these heaps, picking up here and there stray bits which may help to quiet the pangs of hunger.

The river narrows and becomes more and more crowded with craft of various kinds as we approach Ichang, where all passengers and cargoes have to change boats. Heavy junks built to withstand the rapids of the upper stream lie waiting for their loads. Those going down the Yangtze have their masts lashed along their sides, as with the current there is no need of sails.

Beyond Ichang lie some of the grandest gorges found on any river in the world. Towering cliffs hundreds of feet high shut in the whirling mass of waters, which tear down over the wildest rapids ever navigated by boats. The Chinese sailors are very skillful in guiding their boats through this dangerous stretch of waters, yet in spite of their skill hundreds of junks are dashed to pieces and many lives are lost in this part of the river every year.

The heavy boats are drawn upstream by hand, as in China hand labor is cheaper than steam-driven machinery, and coolies' food than coal. Strong bamboo cables attached to the boat are seized by scores, and in the case of large junks by hundreds, of sweating, screaming, scrambling coolies. Over rocks and cliffs, now falling on sharp stones,

now slipping into the water, now straining forward until they appear like animals walking on all fours, they tug and pull with might and main, taking as many hours to pull the boat a few miles upstream as it will take minutes for it to come down with the swift current. Each junk carries many men to pull her up the river, but at the rapids many more are needed. The coolies who do this hard work are called trackers, and they represent one of the lowest classes of Chinese laborers. During the navigable season they come from long distances to the river, and their miserable villages can be seen all along the upper Yangtze. Close to the water, in rude huts of matting, they live, half clothed, dirty, and noisy, eking out a miserable existence on a few cents a day until their exhausting labor wears them out.

Even more exciting than the tug up the river is the plunge down through the whirling waters. As a great junk takes the leap into the rapids, the rowers, all yelling and screaming, direct her course, while the captain's voice, as he shrieks his directions, rises above the tumult. The foam and spray dash high over the boat as it spins around, but it usually emerges safe and sound at the foot of the rapids. Some are less fortunate and are dashed against hidden rocks. Timber and wreckage are carried downstream, and the crews are lost beneath the foaming waters.

Perhaps you wonder why this river traffic is carried on against such odds, and whether the goods transported are of sufficient value to justify this loss of life and property. The Yangtze River with its tributaries is the outlet of the province of Szechwan in western China. This province, the largest in China, is smaller than Texas, yet it contains two thirds as many people as the entire United States.

It is one of the richest divisions of the country ; from it fruits, vegetables, grains, opium, tobacco, rice, silk, hides, musk, rhubarb, and many other products are shipped in immense quantities down the Yangtze, and there are rich stores of coal and other minerals awaiting future development. No railroad follows the Yangtze valley, and the great river must for years carry the immense trade from the inland provinces to the coast.

There are other rivers in China which are much smaller than the Amur, Hwang, and Yangtze, but which are of great importance. One of these is the Pei River, which, though only about the length of the Hudson, is the most important river in the north. The city of Peking is only about twelve miles west of the Pei, and Tientsin, the greatest commercial port in the northern part of the republic is about eighty miles from its mouth. The Pei is one of the crookedest rivers in the world, and its twists and turns are so many and so sharp that it needs a short ship and a good pilot to navigate it as far as Tientsin. Beyond that city it is unnavigable except for small native craft.

The province of Chihli, which the Pei River drains, is about as densely populated as the plain farther south, and near Tientsin and beyond, the river is nearly filled with Chinese junks, European vessels, and other craft. The banks are lined with villages of mud huts and little one-story houses packed so close together that every available inch is covered. Women with tiny, crippled feet, children with bare, brown bodies and flying queues, and men with loose, dark-blue cotton blouses and trousers, such as are worn by nearly all Chinese, are as thick as ants on an ant hill, and as busy.

Tientsin is the port of Peking and the door of northern China, Mongolia, and the adjacent Russian possessions. It is situated at the northern end of the Grand Canal and at the head of steamer navigation on the Pei River, where many waterways and highways converge, and it dominates northern China as Shanghai does the part of the country farther south. It is a city of nearly a million people. The low houses built of dingy gray brick, the dull-tiled roofs, the crowded quarters, and the narrow streets have no beauty or splendor, yet Tientsin is much cleaner and healthier than many Chinese cities. In the Boxer riots of 1900 much of it was destroyed, and in its place, under foreign engineers, a modern city has been built for the Chinese, which, compared with many native cities, is clean and decent. The streets are not so wide, however, but that we must crowd against the buildings to avoid being run down by the long line of shaggy, soft-footed camels, which, with noses high in the air, move silently along, turning their heads neither to the right nor to the left. If we could peer into the heavy packs on their backs, we should find them full of wood, furs, hides, grease, plaited straw, and other products from the tribes of Mongolia and Central Asia. In the part of the city near the river are warehouses filled with brick tea, the refuse from the tea factories of the south pressed into hard cakes. After a short rest the camels will be loaded with baskets of this brick tea and will start back on their long journey to Mongolia and the northwest.

The rice, grain, and tea which formerly came northward by the Grand Canal is now shipped by sea to Tientsin, where it is stored. From there it is sent to Peking and

thence distributed through the northern provinces. In the river we can see the junks and steamers which have brought these products from Shanghai, and the smaller native boats which will carry them through the surrounding region.

By taking plenty of time we might, if we wished, go from Tientsin to Peking on a wheelbarrow, or we might



FIG. 11. THE GATE OF PEKING IS A CENTER OF LIFE

make the trip a little more quickly, though not much more comfortably, in a jolting, thumping mule cart. For thousands of years camels and coolies, horses and mules, have traversed the same path between the two cities, which no one in the Western world would dream of calling a road. In all that time it has probably never been repaired, though it is the main land highway for the swarms of people whose villages border it for nearly the entire distance.

The small, slow boats on the river would be much more comfortable than any land conveyance, but if we would combine speed with comfort, we must go by train. The cars are by no means as luxurious as those to which we are accustomed, but they are much to be preferred to any other method of travel, and after a ride of four or five hours we find ourselves in Peking, the capital of China.

As you can see by the map, Peking is really a city within a city. The Chinese quarter, in the shape of a rectangle with its greatest width from east to west, is at the south. North of this and partly within it is the Manchu, or Tartar, city with its greatest length from north to south. Inside this rectangle is the Imperial city, walled and fortified like the other two, and in the heart of this inner city lies still another, the Forbidden city, sacred to the ruler, his household, and his guards. From the plan of Peking given on the following page you can note these various divisions and can see that the sacred city with its yellow walls lies in the very heart of the capital.

The family who ruled China for more than two hundred years previous to 1911, when the government was changed to a republic, were not native Chinese but Manchus, people from the province of Manchuria in the north, an interesting region of which you will read in another chapter. The Manchus differed in many ways from their southern neighbors, and the people of China always resented the power of these foreign rulers. For fear of a sudden attack the Manchus separated their city from the southern Chinese section by a wall thirty to fifty feet high and broad enough at the top for three or four carriages to pass one another.

There are hundreds of walled cities and towns in China. Think of the time and labor spent in building these defenses, which are practically useless in modern warfare. The walls of some of the cities are in ruins, but those of

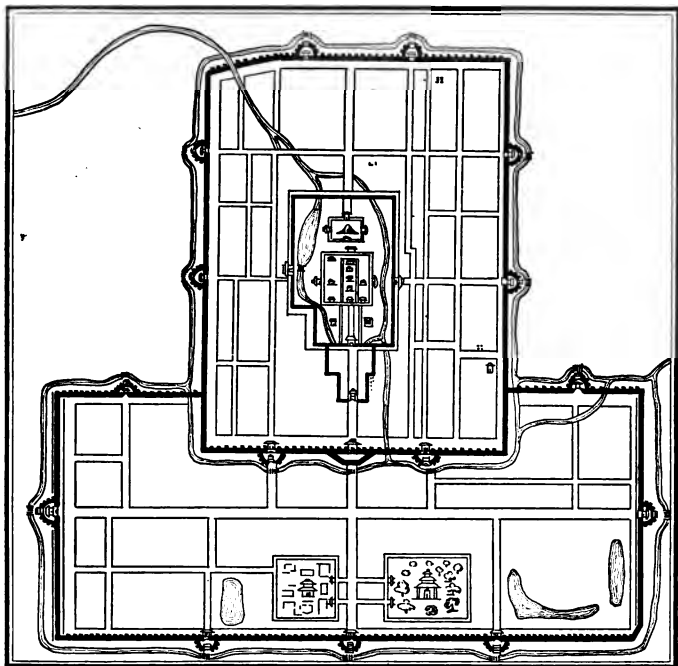


FIG. 12. PEKING IS REALLY A CITY WITHIN A CITY

Peking are in excellent repair. In years past the gates were closed at night, and travelers in the roads around the city made all possible haste to get inside before they were shut.

The heart of Peking is where the center gate of the Manchu city opens into the Chinese quarter. The great



streams of trade and travel, the dust, the hum, the shouts, and the smells are thicker here than anywhere else in the city. Here we should meet numberless beggars, heavily laden donkeys, endless processions of Peking carts (which some one has described as red and blue dog houses on



FIG. 13. WE SHOULD MEET MANY PEKING CARTS

wheels), long lines of ungainly camels bringing their heavy loads from the north, closely curtained sedan chairs containing some royal beauty or high official, creaking wheelbarrows pushed and pulled by coolies and mules, and the never-ending stream of sweating, shouting, bending, straining human carriers forcing their way through the crowd.

Peking is the only Chinese city which has any considerable length of wide streets. In the Manchu portion there are several macadamized highways and some others wide enough for two carriages to pass each other; extending southward from the center gate of the Manchu city through the Chinese quarter is another wide avenue two miles in length; but elsewhere in the great capital there are but few wide or paved streets. All the traffic made necessary by a population of a million people is carried on through narrow lanes, which are dusty, muddy, or cut into deep ruts.

The numerous workers, barbers, cobblers, blacksmiths, and sewing women, the tea, fruit, and rice stands, and the wares displayed before the doors of the shops serve to make the narrow streets even narrower, so that in many cases they are not more than ten or twelve feet wide.

These narrow streets are lined with tiny shops, and if it were not for the dirt and the smells, we could wander for hours among them and see everywhere something to interest us. In the bazaars one can find anything from a jade belt buckle and dainty fan to second-hand clothing and furs. The lantern bazaars are interesting and carry on a thriving business. In certain parts of the city where there are no electric lights everybody carries a lantern at night. Many of the houses are lighted with these queer-shaped lanterns, though lamps are coming into use more and more each year.

The houses all look very much alike, and as we ride through street after street lined with odd little dwellings, we wonder where the wealthy people live and where the poorer families are found. It is one of the queer things

about China that the houses of the rich and the poor are crowded together in the same streets. Most of the buildings are one story high with blank walls facing the street



FIG. 14. THE TEA, FRUIT, AND RICE STANDS MAKE THE NARROW STREETS EVEN NARROWER

and with windows and yards and courts in the rear where they can be enjoyed in privacy.

In the Manchu city we meet many tall, fine-looking women with graceful carriage and well-formed feet. The Manchus have never disfigured themselves by foot-binding. In the Chinese quarter, however, the few women who are

seen hobble along on their poor little stumps of feet in an ungainly fashion. Imperial edicts have forbidden foot-binding; missionaries have labored for years against it; edu-



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**FIG. 15. WHEN A LITTLE GIRL IS FROM FIVE TO EIGHT YEARS OLD, HER TOES ARE BENT DOWN AND TIGHTLY BOUND**

cated Chinese have seen the folly of it; but, although much progress has been made, the custom is still general. When a little girl is from five to eight years old, her toes are bent down and tightly bound in that position. From time to time the bandages are drawn tighter around the poor deformed feet, and for weeks and months and even years the pain is dreadful.

But no matter how great the suffering, even a kind, loving mother will pull the

bands closer and closer, in order that her daughter, when grown, shall have the much-desired "golden lilies," as the tiny dwarfed feet are called.

Peking is one of the most interesting cities which we shall visit, and even though we spent weeks instead of days

inside its high walls, we should still be loath to leave it. We shall not have a correct impression of this great nation, however, unless we visit southern China, as the life there is different from that in the north. So we shall leave the great capital for a trip on the Pearl River, a southern waterway which, though shorter than any we have mentioned, is of great importance and, through its branches and canals, penetrates hundreds of miles into the interior. Because the great city of Canton is situated on its banks this waterway is also called the Canton River, while in the Chinese language it is known as the Si Kiang.

Strange as the scenes on the banks of the river may seem to us, the life on the water itself is yet more interesting, for the river is inhabited as well as the land. Thousands, even millions, of people in China live on the water. Not only the Pearl, but the Yangtze, the Hwang River, the Grand Canal, and many of the smaller waterways are crowded in places with the house boats of people who know no other homes. They have never been out on the open sea, perhaps, and many thousands of them have never lived in a home on the land. Many of the boats have huge, staring eyes painted on them. Their use was explained by a Chinese in his broken language as follows: "S'pose no got eye, no can see; s'pose no can see, no can walkee."

The boat in which a family lives serves not only as a home but as baggage car, peddler's cart, ferry, and workshop for "butcher and baker and candlestick maker." On these little crafts, shaped something like a watermelon cut lengthwise, the people live busy lives, fishing, tugging, cargo carrying, and peddling goods of every description. The boats swarm with naked children and yellowish-brown

dogs. Many of the children, especially the boys, are tied to some object on the boat, to prevent their falling overboard. In some cases they have fastened to their backs a small sealed cask, which will float in the water and so prevent drowning.

Each boat is numbered and has its own particular mooring place at night. The river people can buy everything necessary from boats, just as the people on land buy from stores, and each boat displays from its mast a sample of the goods it carries for sale. There are boats with vegetables, groceries, cloth, flowers, fish, crockery, and fuel; there are barbers' boats, doctors' boats, kitchen boats, and boats with everything needful for life.

Many Chinese are engaged in fishing, as fish is a very common article of food, and many and strange are the devices employed in catching them. One of the queerest methods is training cormorants to do the work. A cormorant is a large fish-eating bird with a long neck, around which the fisherman fastens a ring just large enough to prevent the bird from swallowing its prey. The cormorants stand on the edge of the boat until the fishing grounds are reached, when they are put one by one into the water to dive for fish. When a bird has one or more in its mouth, it returns to the boat, where the owner removes the fish and puts the bird back into the water to catch more. So well are the cormorants trained, and so quickly do they work, that three or four will support a family.

Another queer occupation which we shall see on the Pearl River and its branches is duck farming. On some old junk the farmer raises both his ducks and his family. At suitable places the ducks are put on shore to feed, and at

night they are driven back to their quarters in the junk. They come in a hurry, flying and quacking, as the last one on board always gets a whack from the farmer's stick.



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**FIG. 16. ONE OF THEIR QUEEREST METHODS OF FISHING IS TRAINING CORMORANTS TO DO THE WORK**

The island of Hongkong, near the mouth of the Pearl River, is one of the most distant colonies of England. The Irish soldier stationed there was right when he said in his humorous way that they could not send him farther from

home without sending him nearer. This Chinese colony is of immense importance to England. On account of her business interests in China and Japan and her possessions in India it is necessary for England to keep a large war fleet in these Far-Eastern waters. To furnish fuel for the vessels a coaling station near at hand is absolutely necessary, and Hongkong, with its wide, deep harbor, makes a fine one. The island also commands the trade of southern China, with its millions of people just awakening to a knowledge of the great wealth of their own country, and of the necessities and luxuries which must come to them from other parts of the world. Hongkong is the meeting place for freight and passenger steamers from North America, South America, Europe, Africa, New Zealand, Australia, and India. On the water front we meet representatives of nearly every nation on the earth, see a motley collection of costumes, and hear a variety of languages, from the familiar English and the musical Hindu to a jargon of mixed Chinese and English spoken by the natives of the southern coast towns and known as "pidgin English."

The first view of Hongkong is very different from the approach to Shanghai or Peking. Those cities are situated on low, wide plains, while Hongkong is on a rocky island with mountain peaks rising behind the city to a height of nearly two thousand feet. The city itself is built in stories like a house. On the first floor, nestling at the foot of the cliffs, is the business quarter. Above, in the second story, are beautiful houses with many of the comforts and conveniences common to Western cities, such as good streets, parks, gardens, and electric cars and lights. On the hills behind these rise the summer residences, where most of the





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**FIG. 17. ON THE FIRST FLOOR, NESTLING AT THE FOOT OF THE CLIFFS, IS THE BUSINESS QUARTER, AND ABOVE, IN THE SECOND STORY, ARE THE HOMES AND THE GARDENS**



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FIG. 18. YOU WILL FIND IN HONGKONG GOOD STREETS, GARDENS, PARKS, AND ELECTRIC CARS AND LIGHTS

Europeans find it necessary to go during the hot, damp season. Hidden in the cliffs and rocks are forts which command every landing place, and the red-coated British soldier is as familiar a sight on the cliffs of Hongkong as he is on the heights of Gibraltar.

Leaving Hongkong, we will sail up the Pearl River to Canton, ninety miles away. This city, one of the great centers of southern China, is twice as large as San Francisco. As we approach, the river grows more and more crowded with craft of all kinds, until the tangle of boats is so great that it seems as if we could not possibly get through; but with much shouting and confusion we finally succeed and tie up at one of the wharves.

Here in Canton, as in other Chinese cities, the foreigners live by themselves in a section which they have made to resemble in many ways their Western homes. No one except a Chinaman could live and work surrounded by such crowds and smells and dirt as are found in the native quarters. The foreign settlement in Canton is on an island in the river, where we shall find attractive houses, gardens, and broad streets well lighted and paved. But all these we can find in our cities at home, and as we wish to see new sights, we will remain for a time in the native quarter.

Can you imagine a city of nearly a million people, one of the largest centers of the most populous nation on earth, with not a wagon in it, or a horse, or any other beast of burden? Can you imagine St. Louis with no water supply except what is obtained from the river and carried around the streets in pails by water carriers? Can you picture Chicago with no electric lights and with no street cars; with policemen who sound a rattle as they make their rounds in the darkness, to frighten away rather than capture burglars; with buildings only one story high instead of skyscrapers; with streets only eight feet wide and in some cases roofed over with matting to keep out the sun?

Can you imagine, in front of the stores, long, narrow vertical signboards several feet long and brilliantly painted in yellow and black? If you can picture all these things, you will then have some idea of what certain parts of the Chinese city of Canton are like.

As in other Chinese cities, each kind of business is carried on in a section by itself. The little shops with open fronts which line the alley-like streets are extremely interesting. We see not only the goods for sale but the men at work on them. There are jade polishers, carvers of ivory, sandalwood, and teakwood, and fan makers pressing, drying, and binding the huge palm leaves. Perhaps the matting on your floor, the candied ginger root which you like so much to eat, or that beautifully embroidered silk robe which you saw displayed in a shop window may have come from some little shop in Canton.

There are markets with curious products, such as birds' nests for soups, which only the rich people can afford, and rats for the very poorest. There are many shops filled with articles which the Chinese think their dead may need in another world — paper money, weapons, and tools. These are purchased in great quantities, as not even the poorest Chinese coolie would think of allowing any of his relatives to wander through another world lacking the means of making himself comfortable. Canton is a center of the silk industry, and besides the thousands of little shops such as we have described, there are large factories filled with modern machinery.

Having seen the great waterways and a few of the cities of this interesting nation, let us next visit the country portions and see the farmers at work. We shall find the farms

small and the methods of work strange to us, but for all that, the Chinese are the best farmers in the world and care for their tiny farms in a way that would make even a thrifty New Englander open his eyes in astonishment.

## TOPICS FOR STUDY

### I

1. Queer customs of the Chinese.
2. Age of the Chinese Empire.
3. Isolation of the country.
4. Size and population.
5. Land of great waterways.
6. The Amur River.
7. The Hwang River.
8. The Yangtze River.
9. Cities of the Yangtze valley.
10. The Grand Canal.
11. The Pei River.
12. Tientsin and Peking.
13. The Pearl River.
14. Hongkong and Canton.

### II

1. What do you know of the ancient history of Persia, Egypt, Greece, and Rome?
2. Name the natural boundaries which separate the Chinese possessions from the rest of Asia.
3. How wide is the Pacific Ocean? How long does it take to sail from Hongkong to San Francisco?
4. What river for a part of its course bounds Manchuria on the north? Which is the most useful river of China?
5. Find the mountains in which each river rises.
6. Write a list of the Chinese cities which are mentioned in this chapter. Beside each one write the name of a city in Europe, and one in America, in the same latitude; make another list of European and American cities of about the same size.

7. Name the waters sailed on and the cargoes carried in going from Shanghai to some port in England; in France; in Germany.
8. Sketch a map of the Chinese provinces. Show in it the following:
  - a. The surrounding countries and waters.
  - b. The chief cities.
  - c. The chief rivers.
  - d. The Grand Canal.
9. Name any articles that you have seen which you think may have come from China.

## III

Be able to spell and pronounce the following names. Locate each place and tell what was said about it in this chapter.

British Empire	San Francisco
Russian Empire	St. Louis
Persia	Chicago
Siberia	Hongkong
Japan	Ichang
Egypt	Nanking
Greece	Tientsin
Rome	Hangchow
France	Peking
England	Shanghai
Germany	Yangtze River
Austria-Hungary	Hwang River
Minnesota	Pei River
Louisiana	Pearl River
Texas	Amur River
Florida	Sungari River
Mongolia	Hudson River
Manchuria	Mississippi River
Tibet	Missouri River
Chihli	Columbia River
Szechwan	

## CHAPTER III

### CHINESE FARMS AND FARMERS

In undeveloped countries the majority of people are usually farmers, each one raising on his little farm the whole or a part of his food supply. China is such a country, and the Chinese are the most economical and industrious farmers to be found anywhere in the world. Most of the farms are small ones of two or three acres each, yet so carefully are they cultivated that this little area supports a whole family in what the Chinese consider a comfortable way.

The Chinese possessions include such a large area that the climate, and therefore the products, of the northern and southern portions differ greatly. Everywhere except in the extreme north the land is made to yield at least two crops a year, and in the southern regions even more.

Every farmer cultivates as much land as he can irrigate and fertilize. These areas are so small that there are parts of the country which, though fertile, are as yet undeveloped. No land in the cultivated regions is wasted. One reason why the roads are so narrow is because the farmer pushes his crops inch by inch out into the highway until this becomes a mere footpath. The mud washed down by the heavy rains is scraped up and returned to the fields. The traffic on these narrow roads is very heavy, and they gradually become lower until they lie below the level of the land around, and in wet weather are simply ditches and mudholes.

Little land can be spared for orchards except those of the mulberry, and even here beans and other vegetables are planted between the rows of trees. Fences are seldom seen, but sometimes useful trees, such as the mulberries or bamboos set close together, serve the purpose. The banks which separate the rice fields are planted with a single row of beans, and even the grains, barley, rye, wheat, and millet are sown in rows, so that some crop which ripens at a different time may be planted between them.

Besides the more common vegetables such as are raised in the middle and northern parts of the United States, the grains mentioned above are the chief product of northern China. Millet is the most important of them all and is raised in great quantities. Wheat is the chief food grain in our country, but millet and rice are used in the East. Millet grows to about the same height as corn, which it resembles in appearance, though it has a smaller stalk and a narrower, thinner leaf. The giant millet grows even taller than our tallest corn. The grain is crushed and ground into flour, the stalks yield a rich sirup and a coarse sugar, and, when dried, are used for fodder and fuel.

Of all the products of Chinese farms, tea and silk are the most valuable. Their cultivation and manufacture will make so long a story that we shall need a separate chapter for each of them. One farm product which has been raised very extensively in China, and which has been the cause of poverty and suffering, is the poppy plant, from which opium is made. For many centuries its cultivation was forbidden in China. It was, however, raised in great quantities in India, and hundreds of tons of opium were sold in Chinese ports. It was impossible to stop the importation, as the



trade was in the hands of English firms who were powerful enough to do as they pleased in the matter. Rather than see so much money go out of the country to pay for the drug, the Chinese government permitted the plant to be cultivated at home. Soon thousands of acres were devoted to the raising of poppies, which in many provinces took the place of wheat and millet, thus causing famine and suffering.

The poppy was a profitable crop, as a little opium has a greater money value than a much larger quantity of grain. It is easily harvested and, on account of its small bulk, is readily transported on the backs of carriers or in wheelbarrows. Perhaps you wonder why, if opium is such a profitable crop, the Chinese government should have made laws forbidding its cultivation. One reason was that the land was needed for food crops; another was because of the very bad effect that opium has on those who use it. Opium smokers become lazy and indifferent, unable to think well or to do hard work. After one has become accustomed to its use, it is almost impossible to give it up. The Chinese were no exception, and the opium smokers would part with almost anything to obtain the drug. Crops, lands, houses, and in some cases even wives and children were sold to procure it, until in many provinces the majority of the people were reduced to miserable poverty.

So bad did conditions become that the government finally took the matter in hand and decided to abolish its cultivation and its use. This has been a hard matter to accomplish, as the government is handicapped for help. In the United States the government would be aided by the churches and newspapers and magazines, the schools and woman's clubs and other organizations, but we must

remember that the Chinese government has no such helps in putting through any reform. There is no preaching such as we have in our churches; the schools would not think of taking up such questions; women have no place in public life, no part in any discussions; there are few newspapers and fewer magazines printed; the Chinese seldom leave their homes to make visits or to travel through the country, so there are but few ways of spreading new thoughts or of reaching the people.

So long as China remained a nation of opium smokers it was probable that she would never progress far in civilization and power, but with the curse removed there is no reason why she may not advance in industries and commerce and gradually take her place among the important nations of the world.

If bread is the staff of life in Europe and America, its place is taken in eastern Asia by rice, which is the staple food for the majority of the people of China, Japan, India, and the East Indies. These are the most densely populated regions of the world, and it is said that more people live on rice than on any other grain. To supply the immense demand for it, millions and even billions of pounds are raised in Asia. To draw the crop of China alone, estimating two tons to an animal, the horses, if harnessed in pairs, would reach nearly halfway around the world. Rice is raised in nearly all parts of the country, but southern China is the rice region and the southern Chinese are the rice eaters. The grain has been their chief food for thousands of years, and for centuries they have carefully studied its cultivation in order to get as large crops as possible from their tiny farms.

The products of any land depend largely on its soil, surface, and climate. In China these are well suited to the production of rice. In the warmer portions of the country there are many low plains and fertile river valleys, where



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FIG. 19. RICE FIELDS ARE INCLOSED BY LOW EARTH BANKS

the rice plant flourishes and where the many streams furnish plenty of water for irrigation. The fields are inclosed with low earth banks in order that the crop may be flooded while it is growing. There is no prettier sight than a Chinese rice field when the grain has just covered the marshy ground with a thick, grassy mat of soft, delicate green.

Not all parts of China, however, are low, level, and easily flooded, but so necessary is the rice crop to the people that in many places the farmers have terraced the hillsides and surrounded each terrace with low walls. These higher farms need irrigating even more than the lowlands. By means of water wheels turned by foot power or by mules



FIG. 20. A SMALL CHILD OFTEN RIDES ON THE BACK OF THE BUFFALO TO SEE THAT IT DOES NOT STRAY TOO NEAR THE CROPS

or buffaloes the water is lifted to the uppermost terrace, from which it trickles down over the lower ones. In our trip through the country we shall see many buffaloes, which are the common farm animal of southern China. Some are taking their daily nap in the muddy water of river and canal, where flies and mosquitoes cannot annoy them; some wander slowly along the banks, nibbling the green grass, while small children, perched on their backs, see that they

do not stray too near the crops ; others are slowly drawing through the flooded rice fields small wooden plows, which churn the soil into a rich liquid mud.

The fields of China have been cultivated for thousands of years, yet there is no sign of soil exhaustion. This is due partly to its fertility, but largely to the painstaking care of the Chinese farmer. Fuel and fertilizer are his two greatest necessities. Streams are dredged and fields and highways scraped, and what cannot be burned is used on the farm. The muck from canal beds, the sewage of the cities, the thick, muddy water of the rivers, the refuse from the home — all are used to enrich the soil of the small strip of land which, in thousands of cases, keeps the family from starvation.

Rice is first sown in some small patch, where it springs up as thick as grass. The fields where it is to be planted are flooded to a depth of three or four inches, and after the soil has been softened by the water, the farmer stirs it with his plow into a thick mud. We should hardly care to join the rice planter in his work, for he is usually bare-footed, ankle deep in mud and water, and many of these farmers suffer in consequence from diseases of the feet and from rheumatism.

Look at those people in their big hats, wading in the water to transplant the rice. They take the green shoots a few at a time from the plot where the seed was first sown, make deep holes in the mud about ten inches apart, set the plants, and press the earth firmly about them. All through the summer they work in the muddy field, hoeing, weeding, and flooding the precious crop, until in the fall the tall yellow grain is ready for harvesting. The farmer

and his family start in the early morning for the fields, often some distance away. The babies are piled on the wheelbarrow with the kettle of rice. The mother often rides too, for with her tiny feet it is impossible for her to walk far. The father pushes the load, while the older children run along the narrow path which serves for a road.



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FIG. 21. WITH HIS PLOW THE FARMER STIRS THE SOIL AND WATER INTO A THICK MUD

Let us visit the field with the reapers and see how the harvest is gathered. The country is beautiful at this time of the year. Many acres are covered with the tall yellow grain, which from a distance looks not unlike a field of wheat. The water has been let off and the fields are drier than at any time since the rice was planted. The farmer cuts the rice with a sickle, and one of the boys helps him

tie it up in bundles, while the wife and the other children glean the field clean of every straw. Later they will pull up even the roots and carefully save them to add to the fuel pile at home. The next day the sheaves of rice may



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**FIG. 22. THE FARMERS IN THESE EASTERN LANDS BEAT OUT THE PRECIOUS GRAIN BY HAND WITH LONG WOODEN FLAILS, WHICH THEY SWING VIGOROUSLY HIGH OVER THEIR HEADS**

be placed in the low forks of trees or on bamboo poles, as the little farm is on the banks of a river which, in one of its frequent floods, might wash away the grain if it were stacked on the ground.

Every Chinese village has at least one threshing floor, and many of them have several. They are made of hard earth or concrete, and after the harvest time they are the



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**FIG. 23. A COMMON METHOD IN JAPAN IS TO DRAW THE RICE BY HANDFULS THROUGH A COARSE COMB**

busiest places in the village. On one we might see the farmer and his family beating out the grain with long wooden flails, which they swing high over their heads. On



another we might find the patient buffalo going back and forth, treading out the rice with its heavy feet. A common method in Japan is to draw the rice by handfuls through a coarse comb, then take it to the threshing floor and throw it by shovelfuls into the air; the wind blows away the light chaff and dust, and the rice falls back in a heap by itself. Let us take a handful and examine it. It is covered with a brown husk and looks very different from the white, polished grain which we use. Unhusked rice is called "paddy," and in these Eastern countries it is stored with the husk on, as it keeps better when thus protected. Before being used, it is put into a wooden mortar and pounded with a mallet to remove the brown covering. The pounding of

rice is the daily work of the women and children, and is a familiar sound in almost every village of eastern Asia.

When the husk is removed, the grain is rough and dull. The smooth, pearly white rice which we use here in the United States has been polished by being thrown by machinery against rollers covered with skin. It is said that the outer part, which is thus scoured off, contains as much nourishment as that which is left. The polished rice,



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FIG. 24. POUNDING RICE IS THE DAILY WORK OF THE WOMEN AND CHILDREN IN THE COUNTRIES OF EASTERN ASIA

therefore, which is eaten in the United States is not so healthful as the unpolished grain that is eaten in Eastern countries. Indeed, it is doubtful if the Chinese coolie, if fed on the smooth, polished rice, would thrive as well as he does on the duller kernels.

Most of us would feel that we fared rather poorly if we had nothing for dinner but a bowl of rice, especially if we had to eat it, as the Chinese do, with chopsticks. As fuel is scarce in China, rice is not always cooked fresh for every meal. A large quantity is cooked at a time, and this is warmed over by adding hot water, which in the cities can be bought from street venders cheaper than it can be heated at home.

The Chinese know how to cook rice very nicely. They boil it in such a way that each grain is soft and tender, yet firm and separate from the others. Millions of people live and work on a diet of rice, with a bit of fish or some vegetables, or, more rarely, a little meat, added to give a flavor. They seldom eat rice by itself or with milk, as we do; to most of the Chinese milk is an entirely unknown article. A few cattle are raised in the northern part of the country, but on the densely populated plains, where every inch of ground is used for the necessary food crops, none can be spared to furnish grass for cattle.

It is said that a Chinaman can live comfortably if supplied with only two products, rice and bamboo. There are other grains besides rice which perhaps might serve as his food, but it is hard to see how he could get along without the bamboo plant. In southern China the houses and many of the furnishings are made from it. It is used for tables, chairs, dishes, mats, baskets, umbrellas, hats, canes, pens,

and paper. The seeds are ground into meal, and the tender shoots are cooked for food. The bed for sleeping, the chopsticks for eating, the broom for sweeping, and the fuel for cooking are all made from bamboo.

On account of the amount of care and labor necessary to produce a good crop of rice, it is rather an expensive grain. Few of the poor people in the northern part of the country, where little rice is raised, can afford to use it. Thousands of them live on millet instead, and many others on sweet potatoes, the very poorest families sometimes cooking and eating even the vines. Many kinds of fish are eaten, and a variety of vegetables, such as turnips and cabbages and especially beans.

Pickled beans, bean curd, and soy, a kind of hot sauce something like the Worcestershire sauce with which you are familiar, are all common dishes. Besides these food crops there are thousands of acres in China devoted to cotton, the chief clothing material of the people. In the winter the cotton garments are padded to make them warmer, and the wearer increases the number as the weather grows colder. The Chinese measure the temperature by the number of coats they wear rather than by a



FIG. 25. PEOPLE IN NORTHERN CHINA LIVE ON MILLET. THEY GRIND THE GRAIN BETWEEN TWO STONES

thermometer. They speak of the weather as a two-coat cold day or a four-coat cold day, as the case may be.

Among other farms which we might visit in southern China are those where sugar cane is grown. The Chinese do not refine the sugar until it is white like ours, but simply boil down the sap into brown cakes somewhat resembling our maple sugar. Great quantities of the juicy cane are wrapped in matting and sent to the northern provinces, where it is cut into short sections and sold to the people, who suck the sweet sap which it contains.

Most of the farmers of China live in villages and towns and sometimes go considerable distances to their work in the fields. Let us visit one of these villages and see how the workers of this great nation live. The country through which we are passing looks very different from that which surrounds villages and towns in the United States. There are no forests or pastures or meadows, no haystacks or cattle, no barns or windmills. Instead, we see the open fields intersected by a network of canals and surrounded in many cases by low green banks. There are few orchards except those of mulberry trees, and the only shrubs are the acres of tea plants which cover the hillsides. Not a stone or a weed or a useless stalk of any kind is in sight. Land is too precious in the crowded parts of China to waste any in neglected corners or weedy, uncultivated areas.

Now that we are nearer the village, we see its brown mud walls, and soon we pass through the gate and find ourselves in the midst of the people. How low and dirty and crowded the houses are! We see no pleasant porches or front yards, no lawns or parks, or any of the things which make our towns so attractive. The mean little dwellings cluster

thickly together along the narrow street and on the banks of the canals. These serve as the waterways, the wells, the washtubs, and the bathtubs for the entire population. Luckily for the health of the Chinese, they seldom if ever drink cold water. Tea made from boiling water is the universal-drink.

Of course there are in China many wealthy people who have fine residences, where the grounds occupy several acres. These are inclosed by walls, so that one sees nothing attractive from the outside. Inside, however, there are pretty parks, lily ponds bright with goldfish, tiny streams and artistic bridges, miniature mountains and green valleys, beautiful gardens, and orchards of tempting fruit. But those who can afford such homes are few compared with the poorer working people, who in any country make up the bulk of the population. In China most of these live in little one-story houses made of reeds or mud or bamboo, or, in the north, of sun-dried brick, with thatched or tiled roofs. Black pigs (the most common domestic animal in China), hens, chickens, and ducks, and reddish-brown Chinese dogs wander in and out of the houses at will, adding more dirt to the already filthy brick or earth floor.

Let us peep into one of the houses. The small rooms look very full. There are few outbuildings in Chinese villages, and everything is stored in the houses. In the corners are jars of grain, farming tools, and a spinning wheel and loom. On a long shelf near the ceiling are turnips, cabbages, and other vegetables, some jars of pickles, and some of watermelon seeds, of which the Chinese eat great quantities. The rooms have no closets, and the few clothes of the family are either packed in a small chest or

hung on a bamboo bar. After seeing their homes we do not wonder that the Chinese people carry on much of their work in the streets.

An architect would find business very dull in China; the houses are so much alike that there is no need of having any plans drawn. There is not a chimney in the village; the smoke goes out where it can, or, if it finds no outlet, it stays in. Consequently the kitchens are black with soot. What a queer-looking stove that woman is cooking on! It is built of brick, and on it is some rice cooking in a kettle much larger than the one your mother uses. In a smaller dish some chopped meat and vegetables are boiling. Food is usually cut into small pieces, as no knives or forks are used at table.

How should you like to eat with chopsticks? The Chinese use these smooth round sticks, about as large as a lead pencil, instead of knives or forks or spoons. A Chinese boy or girl can empty a bowl of rice or meat very quickly with a pair of them, but I am sure that you would get impatient before you could satisfy your hunger.

See that sober-faced little girl feeding the fire with straw and leaves! The light fuel burns so quickly that she is kept constantly busy. Except in the extreme northern part of the country, fire is used only to cook with and not to warm the houses. In the colder portions of China, flues to carry the heat from the stove are built under the low brick platform which serves for a bed. In the winter time, though one may find his bed too hot to be comfortable on retiring, he is likely to become cold before morning, as the fire dies down quickly.

In the United States the family gatherings around the table in the evening, with books and games and pleasant conversation, are very delightful even among poor, hard-working people. Not so in Chinese homes. The only light in thousands of houses is a twist of cotton in an iron cup of some vegetable oil. The flickering flame does not light the mean little room, and the family often go to bed without any light at all. Kerosene oil and cheap lamps are being introduced into China, and someone has said that kerosene may prove as great a civilizer as the missionary. If it affords a means by which the family can gather in the evening for a social hour, for reading, or for study, it certainly will help in elevating the life of the poor.

Perhaps you would like to know something of the education of these neighbors of ours across the Pacific. In most Chinese homes, except the very poorest, the boys are sent to school, even if great sacrifices have to be made to keep them there. An old Chinese proverb says, "Better to rear a pig than to bring up a son who will not read." Until very recently the highest offices were given to the students who could pass the highest examinations. Every parent was ambitious to have his sons educated, as otherwise no position of honor was open to them. With the girls, the Chinese thought, an education was of very little advantage, as they would live a secluded life in the home. If they were able to spin and weave, to cook the rice, bean curd, and stews, little more was expected of them.

An old Chinese school would seem like a queer place to us. When our schools are in session, we expect the building to be very quiet, but we can hear the noise from a Chinese school before we reach it. Every boy is studying aloud.

"Of course," says the schoolmaster; "how else shall I know that they are studying at all?" Over and over again the pupil repeats the long, hard lessons until he is sure of them. This memory work is about the only task which a Chinese schoolboy has, and he must do it thoroughly or



FIG. 26. THE PUPILS COME TO THE FRONT OF THE ROOM AND TURN THEIR BACKS TO THE TEACHER

punishment will surely follow. Now the master is to have a recitation. The pupils stand in a row in the front of the room and, with low bows, turn their backs to the teacher and repeat the long lesson they have learned. "How queer," you say, "to recite with one's back to the teacher!" But again the master replies, "Why, of course; how else can I be sure that the pupil does not get a peep at the book which I hold?"



There are many reasons why you would not enjoy the old-time Chinese school. The sitting on the floor or on hard benches would be uncomfortable, the noise would tire your head, and the long hours would be wearisome. A Chinese boy goes to school before seven o'clock in the morning. He studies until ten, when he goes home for his breakfast. He goes to school again from eleven to one, and again after lunch, if he has one, until five or six o'clock. He has no Saturday holiday or even a Sunday off, for except in a few places there are no weekly days of rest in China. He has a few days scattered through the year when he or the master attends some wedding or funeral or enjoys some feast or festival, but his only real vacation is two weeks at New Year's, when everybody, young and old, takes a holiday.

You would find the lessons in a Chinese school long and dull. Except in a few of the most modern ones there is no science, no geography, no music, no drawing, nothing but the memorizing of long, dull pages of Chinese history or the sayings of Confucius, that ancient writer whose books are regarded by the Chinese in much the same way as the Bible is by us.

Formerly, and to some extent at the present time, the training of all boys was just alike, regardless of the positions which they might hold later. The young man who could pass the best examination on the rather useless subjects taught in the schools, who could write the best essay, or compose the finest poem was sure of the highest office. Nothing else counted in gaining a position. You can imagine that such an education did not fit a man to become a minister of war or of finance or to be an officer in the

army or navy. It is no wonder that with officials trained in such unpractical ways the country did not advance rapidly. Happily to-day different ideas in regard to education are beginning to prevail. More schools are being established, broader and more practical subjects taught in them, and better-trained teachers appointed to take charge of them. The education of girls is slowly beginning. It will take time for these improvements to reach all parts of such a great country, but now that a start has been made we can hope for better things for China in the future.

If you should ask a Chinese how many children he had, he would tell you only the number of boys, as he does not consider the girls of sufficient importance to be counted. During the first years of her life a little Chinese girl spends her time playing with other little girls and boys. After she is eight or ten years old she must not play or speak with any boys or men, nor must she be seen in public any more. To be sure, one sees numbers of women on the streets of Chinese cities. These belong to the poorer classes. The higher one goes in the scale of society the more secluded the women are kept.

A Chinese girl's life is dreary and monotonous. In a family of the higher class she is seldom seen out of the house, though there is little in it to interest or amuse her. She has no books, few games and companions, and she seldom makes visits. She spends her time in spinning and weaving, feeding the silkworms, taking care of the babies, embroidering her shoes, cooking the rice and vegetables, and scraping the soot from the bottom of the rice pot. If the family is poor, she may go out into the fields to gather

fuel, pick the tea leaves, or even do the heavier work of carrying burdens on her shoulders like the men.

The life of a Chinese girl is so hard that in many cases she welcomes the day when the matchmaker comes to her home to make arrangements with her parents for her marriage to some boy, whom perhaps she has never seen. When she is married she will leave her old home forever and become the slave of her mother-in-law. The life of a young wife is always a hard one until her own sons have grown up and married. Then her lot becomes easier, as her daughter-in-law will do the hard work for her as she did in her time for her husband's mother. A wife who has no sons is much to be pitied. Nothing else will give her so high a standing in the community or bring her so much respect from her neighbors as a family of boys. If a Chinese gentleman has no sons, he often adopts some relative or, failing that, even some stranger. To understand why a son is so necessary we must know something of the Chinese religion.

Christianity has been introduced by missionaries, but as yet it has few followers compared with the other great religions of the country. The majority of the Chinese are followers of Confucius, a great philosopher who lived and taught hundreds of years before Christ. Confucius said little about God or heaven, but taught the people to love goodness for its own sake and to perform certain duties, chief among them being to honor and serve one's parents, to obey one's elders, and to be loyal to one's sovereign. The respect shown to parents and ancestors has been carried to such an extent that it amounts to worship. No child in China would think for one minute of disobeying his parents, and no penalties are so severe as those

inflicted for crimes committed against them. So great is the respect in which parents are held, however, that it is seldom necessary to inflict punishment.

Blocks of wood with inscriptions on them, called ancestral tablets, are found in every house, and each morning the members of the family kneel before them with offerings. The graves of ancestors are visited at stated times, and food and money (made of red paper) are left on the mounds which mark the resting places. The son of the house, or, where there are several sons, the eldest, takes charge of these ceremonies, and for that reason all parents desire a son, in order that their spirits may be cared for in another world.

You can easily understand that when respect for one's ancestors is carried to such an extent, it must have a bad effect on the progress of a country. The young people think they can do no better than to follow in the footsteps of those for whom they have such reverence. Hence it is hard to introduce new customs, new ways of doing things, modern machinery, and time-saving and labor-saving devices. But, tied as they are to old methods, the Chinese are learning many things from the foreigners who are doing business in the country. They are beginning to realize something of the enormous resources waiting to be developed in the country, and the tremendous power of the four hundred million people within its borders.

The broad, thoughtful, progressive men of China have come to see that if their country is to advance, they must build railroads, open mines, sink oil wells, harness water power, erect mills, adopt machinery, reforest mountains, construct irrigation works, introduce better breeds of

domestic animals and plants, and apply science to the production of food. They must drop ancestor worship, prohibit foot-binding, educate their girls, elevate the position of women, introduce better systems of education, and restrict child labor.

The Western world is waiting to see these things accomplished. It is turning its thoughts to this great awakening nation and trying to predict what its future will be when it is fully aroused to its own great strength and possibilities. A Chinese official recently said to the delegates from some foreign countries, "You are all anxious to wake us up and to start us on a new road, and you will do it; but you will all regret it, for, once awakened and started, we shall go fast and far—farther than you think, much farther than you wish."

## TOPICS FOR STUDY

### I

1. Size of Chinese farms.
2. Variety of crops raised.
3. Economy of Chinese farmers.
4. Millet and its uses in northern China.
5. Poppy farms and opium.
6. The cultivation of rice and its importance.
7. Uses of bamboo.
8. The cotton industry.
9. The production and manufacture of sugar.
10. A Chinese village.
11. Chinese homes and their furnishings.
12. Education in China.
13. Life of a Chinese girl.
14. The religion of China.
15. The future of China.

## II

1. Make a list of all products which you think may be grown in the northern part of "The Land of Great Waterways"; in the southern part.

2. Sketch a map of the country. Write the names of the chief products in the regions where they are raised.

3. Describe the route by which a boatload of rice would go from some city on the Yangtze River to Peking.

4. Ship a cargo of rice from India, and one from Japan, to China; to the United States. Name the waters sailed on in each voyage, and the shipping and receiving ports.

5. Write a list of the uses of bamboo. Write opposite the name of each article the material of which it is made in the United States.

6. Tell some of the industries which you think will be carried on in China in the future.

7. Take a trip from your home city to China. Name the railroads on which you will travel; the sailing port; the places of call on the ocean voyage; the cargo carried by your steamer; the time necessary for the journey.

## CHAPTER IV

### TEA FARMS AND TEA DRINKERS

The century in which we are living is a time of specialties and specialists. Not many years ago the family physician was the highest authority in any case of sickness which might arise. To-day we have specialists for the ear, the eye, the brain, and many other organs. In our great manufacturing plants one superintendent cannot look after all the departments; each one has at its head a man who is a specialist in that particular line.

We might liken different countries to the departments of a great industrial establishment. Chile, for instance, furnishes most of the nitrates of the world; South Africa, the diamonds; Italy, the macaroni; Persia, the most wonderful rugs; France, immense quantities of wine; Switzerland, fine laces and embroideries; England, splendid ships; and Ireland, beautiful linens.

What a blessing it is that all countries do not produce the same crops or manufacture the same articles! On account of the position, soil, surface, climate, drainage, or water power, or because of some special skill which the people have developed, each nation furnishes its own peculiar offering for the comfort or enrichment of the world.

In a large manufacturing plant the heads of departments have much general information as well as the technical knowledge concerning their particular part of the work;

so the countries of the world yield many common useful products besides the one or more specialties for which they are particularly noted. Fifty years ago tea was a specialty of China. To-day we shall have to call it a specialty of southern and eastern Asia, for Japan has found it a very profitable crop, and English planters are cultivating it in large plantations in India and Ceylon.

Man has found many foods in grains and roots and herbs, but he uses only four beverages of great commercial importance. Many of the alcoholic drinks are considered harmful, and nations are trying to limit rather than to encourage their use; coffee is a strong stimulant, and some people find it injurious; cocoa is nourishing but rather heartier than many people desire. Tea, when properly made, is the only light, stimulating drink which most people can drink with no ill effects. It is often spoiled in the making, as many people do not know how to prepare it. I will give you a recipe for making a good cup of tea. Draw some fresh water and allow it to come to a boil. When it is boiling hard, pour it over a teaspoonful or less of tea leaves and let them remain in the water from three to six minutes; then pour off the liquid. Taken immediately, with a little cream and sugar or with a slice of lemon, it is a delicious, refreshing drink. The water should never be allowed to boil after the tea is added, as a substance called tannin is developed which is not wholesome. The secret of good tea making is to get the flavor of the tea without the injurious tannin.

An immense quantity of tea is consumed annually in the countries where it is a popular beverage. The United States imports every year more than one hundred million pounds,



yet Americans are not reckoned among the great tea drinkers of the world. We average only a little more than a pound for each person, while our English cousins drink more than six times as much, and the Chinese and Japanese use more than all the rest of the nations put together.

In both of these Eastern countries tea is used at all times of the day as freely as we use water. The cup of tea in homes and stores and places of amusement is always handy. The Japanese are a healthy race, and the population is increasing very rapidly, which speaks well for the healthfulness of the national



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FIG. 27. THE HILLSIDES AROUND ARE COVERED WITH TEA SHRUBS, AND THE BROAD VALLEYS ARE GREEN WITH THE RICE PLANT

beverage. In China the common water supply is from the dirty rivers and canals, yet, strange to say, epidemics rarely visit the country. This is doubtless due to the fact that a Chinaman seldom, if ever, drinks cold water, but uses it boiled in his tea.

Half a century ago about all of the tea used in the United States came from China. To-day we import great quantities not only from China but from Japan, Formosa, India, and Ceylon. The demand in Europe and America for tea grown in the two latter countries is increasing very rapidly,

and by visiting both a Chinese and an Indian tea farm and comparing the methods which are used on each we shall discover the reason for this.

Great quantities of tea are raised on the slopes of the hills in the Yangtze valley. Let us go into the fields and watch the people at work. What a wonderful view spreads out before us! There in the lowlands, as far as the eye can reach, lie the fields of rice, a pale green carpet with lines of darker green showing the low earth banks built to hold in the water when the fields are flooded. Stretching up from the valley toward the summit of the hills are the tea farms; each one is a tiny unit of only a few acres, but there are so many of them that the lines of plants stretch on and on until lost in the distant haze. The bushes are from three to five feet high. They would grow much taller, but they are kept pruned back to a height from which it is convenient to pick the leaves.

Below, in the valley between the rice fields and tea orchards, are the huts of the pickers. While the mists of early morning still hang thick over the lowlands the women and children come toiling up the hillsides to the bushes, where they work all day picking the young, tender leaves near the ends of the shoots. These bushes have been picked once before this spring, in April, and now, in early June, are yielding their second harvest, the principal one for the season. The leaves will be gathered once more during the summer, but the tea which is made from the third picking is of an inferior grade. Tea plants yield their first harvest when they are about three years old. After this their leaves are picked three times a year for eight or ten years, when the plants are replaced by new ones.

Soon the baskets are heaped with the tender green leaves, which in shape and size somewhat resemble small rose leaves. As the sun sinks over the hills the tired workers go down the paths to the little huts in the valley. They are weary with their long day's work, but before retiring they must prepare the leaves which have been gathered.



FIG. 28. THE LEAVES ARE THEN SPREAD OUT ON A TABLE, WHERE A WORKMAN ROLLS THEM BACK AND FORTH

During the day men and boys have brought the baskets down from the hillsides and have spread the leaves to dry in shallow pans. They are next put into roasting pans, which are heated by fires underneath. Here they are shaken and rolled and moved about for several minutes and then spread out upon a table, where a workman rolls them back

and forth with a peculiar motion of his hands. They are then dried in the open air and again heated and shaken over a slow, steady fire. They are finally twisted and curled by rolling in the hands, until they look like the tea which we buy from our grocer. Later, while the rest of the family are away on the hills, those left at home will spend the long hours sifting and sorting the dried leaves and making them ready for the merchants, who will soon come to buy up the crop of the village.

There are some large tea factories in China, but the greater part of the immense crop of several hundred million pounds is prepared, just as it has been for centuries, in the little cottages of the villages or in small sheds built for the purpose. Most of the product of Japan and Formosa, as well as that of China, is prepared by hand, and you can readily see that where each farmer handles his own crop in the same way that his father and grandfather did before him, there is little uniformity or improvement in the quality of the tea. Just here lies the reason for the rapid growth and the increasing popularity of the teas of India, Ceylon, and Java. In these countries tea is raised on large estates employing hundreds of laborers, and the picking of the leaves is about the only part of the work done by hand. In the great factories there are rolling machines and drying machines with hot blasts and revolving fans, from which the crisp leaves come out pure and clean.

In spite of her unsanitary methods, China is the greatest tea producer in the world. As she awakens to new ways and introduces modern machinery her tea industry will grow in like proportions, for the soil, climate, and surface of the country are well adapted to the crop. The Chinese have

objected to the use of machinery on the ground that if a machine requiring only one or two hands to run it can do the work of twenty-five men, the other twenty-three or four will necessarily be out of employment. They have fought the introduction of railroads for the same reason, arguing that the thousands of human carriers who now convey most of China's burdens on their backs or push them in heavily laden wheelbarrows will have nothing to do. They do not yet realize that in order to furnish food for the greedy machines, to dispose of the products, and to supply the loads for the puffing engines, a thousand new occupations will spring into being and old industries will need more hands.

In a previous chapter we spoke of the religion in China being one of the causes of her lack of progress. Another is the superstitious character of the people and their belief in spirits, lucky days, and magic. It is said that the Chinese language has no word for patriotism, but that there are nearly a hundred to express good luck. The Chinese object to high houses or tall chimneys belching dark clouds of smoke, because they may offend the spirits of the air. The long, dark shadows from telegraph poles would have the same effect on the spirits of the ground. Awful disasters, which have not happened, were foretold if the puffing engines with their heavy loads should be allowed to rumble through the country.

Can you imagine what a bother it would be for you to have to wait for a lucky day to come before you could begin to go to school, make a visit, start a piece of work, get married, or even be buried? Comparatively few bodies are buried within a few days of death, as is the custom here.

Often months and even years pass before the body is taken to its final resting place. The Chinese think that if the earth should be disturbed on an unlucky day, the spirits of the ground would be so angry that dreadful disasters might overtake the living relatives. Their crops might be destroyed, their animals die, or the members of their family



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**FIG. 29. IT IS SAID THAT IN CHINA MORE LAND IS OCCUPIED BY GRAVES THAN BY CITIES**

become ill ; and in the spirit world still worse things might happen to the dead person himself.

When a lucky day finally comes, the body is taken to a lucky place, even if this happens to be on the most fertile field of the little farm. A tenth, and in extreme cases a fifth, of the small amount of land owned by the farmer is often occupied by the graves of his ancestors, and large

areas are thus lost to cultivation. Indeed, it is said that in China more land is occupied by graves than is covered by cities. The graves of their dead are peculiarly sacred, as the Chinese believe that the spirit will sometime reënter the body. If the resting place of some respected ancestor is disturbed and his body removed to another spot, his spirit may be doomed to wander forever without a body.

The evil spirits which the Chinese think so numerous cause a great deal of trouble in other ways. They always fly, so the people think, in straight lines. Consequently the roofs curve up at the lower edges and corners, and the



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FIG. 30. THE ROOFS OF THE BUILDINGS  
CURVE UP AT THE CORNERS

streets are made with many corners, so that the spirits cannot fly easily through the cities and towns ; and for the same reason the doors of the houses on opposite sides of the street are not in line. Before the doors of many houses screens are placed, so that the evil spirits will fly against them and be prevented from entering.

When we think of all these superstitious beliefs, we wonder that Chinese farmers accomplish as much as they do. After the needs of the family are supplied there is little left to export, but the people are so industrious and economical, and the tiny farms are so numerous, that the total amount of goods carried through and out of the country



FIG. 31. WE CAN SEE CAMELS ON THE MARCH  
OUTSIDE THE WALLS OF PEKING

is enormous. Each farmer packs his tea or rice or silk or cotton, and either shoulders the burden or loads his wheelbarrow and carries or pushes his product to the nearest canal or river, whence it is shipped to the great centers. Enormous quantities of tea are thus taken to the Yangtze River and shipped down to Hankow,

the greatest tea market of China. Foochow is another important center, and so numerous and so productive are the farms in the surrounding country that more than thirty thousand coolies are engaged in carrying tea into the city. By train and by boat enormous quantities are sent to Peking, where long lines of shaggy camels utter their odd cries of protest as they kneel to receive their loads. We can see them resting in the city streets and on the march



outside the walls. They will carry tea and other Chinese products northward into Manchuria, Mongolia, and Siberia, and westward into far-away provinces of Central Asia. In southern China thousands of coolies, with sweat rag, fan, and load of tea, trudge for weeks along the narrow paths of Tibet, that isolated mountain land of which the world knows so little.

In the harbor at Hankow, European steamers wait for their loads of tea. In former years, as soon as it was stored in their holds they started on their long ocean race, each vessel trying to make the greatest possible speed, as the tea first landed commanded the highest price. To-day, however, the tea sent by the Trans-Siberian Railroad enters the Russian market before any other.

Many of the tea merchants of Hankow, and some of the steamers which sail from the city, are from Russia. Russians are very fond of tea, and some of the highest-priced Chinese product goes to that country. Those who can afford it drink a great deal. The total amount used in the country is not so great as in some others, as many of the Russian peasants are so poor that they cannot afford even the cheap brick tea made from the waste in the factories.

Not many years ago in China there were few treaty ports, that is, cities where foreign nations were allowed to trade. Now there are a great many both on the coast and in the interior of the country. At some of the most important of these — Shanghai, Canton, Hongkong, and Amoy — large steamers, bound for the United States and European countries, South America, Africa, Australia, and far-away islands of the globe, are being loaded with thousands of lead-lined boxes containing the favorite beverage of the world.

There are people who think they can tell fortunes by looking at the grounds in a teacup. The next time you look at a cup of tea perhaps you will think, not of your future, but of the future growth in China of this great industry which at present is so handicapped by the backward conditions of the country.

## TOPICS FOR STUDY

### I

1. An age of specialties.
2. Area of tea production.
3. Making tea.
4. The consumption of tea.
5. The tea industry of China, Japan, and Formosa.
6. The tea industry of India and Ceylon.
7. Chinese superstitions.
8. Tea centers of China.
9. Tea in Russia.
10. Treaty ports and tea ships.

### II

1. Name the countries from which the most important beverages of the world are obtained. Name the chief port of each country and the waters sailed on in a trip to London.
2. On a map of the world, color the wine-producing countries; with other colors show the countries which produce coffee, cocoa, and tea.
3. Have you ever tried to make tea? How did your method differ from the one recommended here?
4. How many horses, each drawing one and one-half tons, would be required to move our annual importation of tea. Allowing ten feet for each horse, how far would the team extend?
5. Describe the processes in the manufacture of tea.
6. Ship a cargo of tea to the United States from Japan, China, and India. Name the shipping and receiving ports and the waters sailed on in each voyage.

7. On a map of Asia show the tea-producing countries and all the places mentioned in this chapter.

8. Name the ports in South America, Africa, and Australia to which you think tea is shipped.

### III

Be able to spell and pronounce the following names. Locate each place and tell what was said about it in this and in previous chapters.

China	Yangtze River
India	Hankow
Japan	Foochow
Ceylon	Peking
Formosa	Shanghai
Java	Canton
Manchuria	Hongkong
Mongolia	Amoy
Siberia	
Tibet	
Russia	
South America	
Africa	
Australia	

## CHAPTER V

### TIBET AND TURKESTAN

The great Chinese republic is made up of several different divisions, of which China is the largest and most important. The densely crowded areas, the great cities, the boat population, and the rice, tea, and silk industries belong chiefly to this one section, which is about half as large as the United States. Life in other parts of the country is very different. Let us visit some of the outlying divisions and contrast the sights which we shall see in them with the things which we have seen in China.

Besides this most important province there are four other great divisions of the Chinese republic. These are Tibet and Turkestan in the west, Manchuria in the extreme northeast, and in the north, Mongolia, occupied largely by the Desert of Gobi. Of these four provinces Manchuria is the most important, Turkestan the least known, Mongolia the most dreary and monotonous, and Tibet perhaps the most interesting.

Few people realize the immense size of the little-known regions of Central Asia. Tibet is a country nearly as large as Texas, Arizona, and New Mexico, and is the highest inhabited region of the world. Imagine a great barren plateau from two to three miles high dotted with salt lakes and swept by fierce winds. It is surrounded by a wall of lofty, snow-capped mountains, some of them the

highest on earth, in which the chief rivers of China and India have their sources.

Until within a few years Tibet has been visited by very few foreigners. This has been due chiefly to two reasons. Its queer people, shut away from other nations by the great mountain wall, think of their land as we do of ours, as the most beautiful, the richest, and the healthiest country in the world. They think that their religion is the best and their civilization the highest of all nations, and they do not care to see foreigners or to have them enter their country. Comparatively few have done so, as the difficulty of getting into Tibet is great enough to prevent anyone except the most adventurous from attempting it.

Whether one enters from India, Turkestan, or China it is a long, hard climb over cold, dangerous mountain passes. In spite of the dangers, however, they are constantly traversed by native traders with loaded ponies or yaks. A few of the passes are so difficult that sheep are the only animals that can cross them safely. On some of the routes leading southward to India we should meet long caravans of sheep, each carrying its load of twenty-five or thirty pounds. On arriving at the border of Tibet, the tired, foot-sore animals rest for some weeks. Goods are exchanged between the Tibetans and the southern traders, and the sheep are sheared and their wool sent south to Indian factories. The route is so difficult, the rate of travel so slow, and the periods of rest so long and frequent, that the trip occupies nearly a year.

The route into Tibet from Mongolia and northern China is a historic highway, and for centuries pilgrims have toiled over it to the holy city of Lhasa, the capital of Tibet.

Lhasa is as sacred to these Eastern worshipers of Buddha as Jerusalem is to the Jews or Mekka to the Mohammedans. Besides worshiping in the temple, many of the pilgrims take a six-mile walk around the city, praying constantly and kneeling often. Many prostrate themselves every few steps, then draw themselves up, only to measure their length on the ground again, thus making progress in much the same manner as the inchworm does.

If we are coming to Tibet from the west, we shall enter from the Indian province of Kashmir, through the trading center of Leh. This is the most important route for European trade, and Leh is the meeting place of caravans from the east and the west. It is a busy place of several thousand people, the number being greatly increased at times by traders from Tibet, India, Bokhara, Turkestan, and even from far-away Mongolia and China. After the long, wearisome journey over mountains and deserts they remain at Leh for some weeks to rest themselves and their tired animals before starting on their homeward way. All products must be exchanged, and all traffic carried on between Tibet and the surrounding countries, during the short summer, when the mountain passes are open. During the long, cold winter all trade is at a standstill, as for several months of the year Nature locks up this isolated country with a white, frosty key. If we entered Tibet by this western route, we should find ourselves as far from Lhasa, the capital, as St. Louis is from Philadelphia. Our journey eastward to the holy city takes us across a rainless, treeless, desolate solitude given over almost entirely to wild beasts. We meet only a few wandering tribes, who live in these wastes and who change their encampment

with the season in order to find food for their flocks and herds. Their tents are made of coarse yak-hair cloth. Here is a settlement just ahead of us. Be careful as you approach not to dismount until the people call off their dogs, which are barking furiously at us. These Mongolian



FIG. 32. WE GET OUR FIRST GLIMPSE OF THE INHABITANTS OF TIBET

dogs are numerous in all the nomad camps; they seem gentle enough with their owners, but are unfriendly to all strangers.

As the people come out from their tents we get our first glimpse of the inhabitants of Tibet. How queer they look! The faces of the men are wrinkled and seamed from exposure to the cold and dust and wind and the glare of the sunlight. The women's faces are covered with a black, dirty grease which, if it is put on to preserve the

complexion, is worse than wrinkles and crow's-feet could possibly be. The nomads do not shake hands, but give us a cordial greeting by thrusting out their tongues full length and invite us to enter their tents. In spite of the dirt and the smells we are glad to see how they live, though one visit is quite enough.

Around the tents are accumulations of dirt and refuse, and as we step inside, the odor of unwashed people, badly preserved skins, and stores of old cheese make us almost wish that we had refused the hospitable invitation. There are no tables or chairs, and we sit down on the skin-covered ground and lean back against the boxes which line the edge of the tent. Scattered around on the ground and hanging from the walls are pots and pans, water jars, and skins containing oatmeal or barley meal and butter. The butter is made from the milk of the yak, sheep, or goat, and is preserved in skins for months and even years before it is considered fit to eat. A stove made of mud occupies the center of the tent, the smoke from which is supposed to go out through a crack overhead left for the purpose. Perhaps some does find its way out, but a great deal stays inside and covers the sides of the tent and everything in it with a coating of soot.

Should you like to stay to dinner? You might enjoy it once, but I am sure that afterwards you would wish to carry your own provisions. In a brass kettle over the fire is some strong black tea to which a greasy-faced woman is adding some salt and some soda. She pours this mixture into a tall wooden churn something like those used years ago in New England. While she churns the tea vigorously the family sit down around the stove and each one



takes from inside his loose gown a small wooden bowl. He fills this with tea, to which he adds some of the rancid butter. Before taking his first sip he mutters a short prayer, dips his fingers into the bowl, and sprinkles a few drops to the north, south, east, and west. These preparations over, he proceeds to drink his tea with great relish, blowing aside the butter at every sip. When the bowl is nearly empty, he produces from somewhere in the folds of his convenient gown a little bag. From this he takes a handful of barley meal and puts it into the bowl. With his fingers he mixes it with the tea and butter until it forms a pasty ball, which he swallows at a gulp. He then laps the bowl clean and restores it to its place in his gown, where it remains until the next meal.

Sometimes the food is varied by boiling with the tea small pieces of mutton or pork. After gnawing the bones the tent dweller wipes the grease from his fingers either on his face or his boots, whichever one most needs lubricating.

The Tibetan has no difficulty in keeping his meat from spoiling. After cleaning it he hangs it up in the dry, cold air out of reach of the dogs. The juices soon evaporate and the meat dries up and in this state will keep indefinitely.

By the time dinner is over, the air in the tent has become so bad that we are glad to get out of doors and continue our journey through the country. The most traveled path



FIG. 33. SHE POURS  
THE TEA INTO A TALL  
WOODEN CHURN

into Tibet is the famous tea route from China. By this route the Chinese first entered Tibet as conquerors, and over it to-day more trade is carried on than on all of the other routes put together. Over this highway thousands



FIG. 34. MORE THAN THREE THOUSAND TWO-HORSE TEAMS WOULD BE REQUIRED TO DRAW THE TEA WHICH IS CARRIED OVER THIS ROUTE ANNUALLY ON THE BACKS OF COOLIES

of Chinese coolies plod slowly along, carrying on their backs heavy loads of tea. This is shipped up the Yangtze River to a trading center at the head of navigation. From there it is taken by coolies who, with a load of two hundred pounds each, travel day after day along the narrow, uneven path. On the border of Tibet the tea is transferred

to the backs of yaks and ponies, and carried to Lhasa and other parts of the interior. By this slow means immense quantities of tea and other goods are taken every year from China to Tibet. More than three thousand two-horse teams would be required to draw the tea which is carried over this route annually on the backs of coolies. Besides the tea, large quantities of cotton, silk, leather goods, sugar, tobacco, and hardware are carried in the same slow way. In return for these goods the Tibetans bring to the borders of their country for export yak hides and tails, skins of the lamb, fox, lynx, and leopard, musk, rhubarb, and salt.

Let us follow the coolie procession which throngs this old highway into the eastern part of Tibet, where most of the towns are located and where the greater part of the people live. We shall stop for a while in one of the villages and visit the people who live on this lofty plateau. We may not wish to accept their hospitality, as their manner of life does not make a close acquaintance desirable. Perhaps if we lived in their country we might find their customs easier to follow than our own. In a region where there are several degrees of frost even in the warmest months, where the skin chaps in the cold air, where there is no fuel except dried manure, where water is scarce and receptacles for holding it are few, probably we should not take any more baths or keep any cleaner than the Tibetans do.

As we approach one of the houses in the village it seems as if we must be mistaken in regard to the cleanliness of the people, for we see what looks like a part of the family wash flying from the roof. They are not garments, however, but prayer flags. The people are very religious and

pray a great deal, but they think their prayers will be answered just as readily if printed on a flag and hung from their houses as if they spent their time in saying them. We shall find also hundreds of prayer wheels in our trip through the country. These are curious contrivances containing rolls of paper on which prayers are printed. By turning a handle



FIG. 35. THE PRAYER WHEELS CONTAIN ROLLS OF PAPER ON WHICH PRAYERS ARE PRINTED

the paper roll is wound and unwound. These prayer wheels are of all sizes, from small ones easily carried in the hand to those as large as barrels and turned by wind or water.

How queer the village looks with its rows of two-story, flat-roofed buildings made of stone or brick or mud. The first floor is occupied by the animals — the yaks, the sheep, and the goats.

Steps on the outside take us up to the second story, where the family live. If we accept their invitation to dinner, we shall fare but little better than in the tent of the nomad in western Tibet. So, instead of eating, we will look around the village and see, if we can, what these people do all day and in the evenings. The only lights in the houses are furnished by a little twist of cotton or wool in a dish of butter. Because of its age and unpleasant flavor you would probably like

better to burn the butter than to eat it, but the Tibetans use large quantities of it in their food and cannot afford to spare much to light their houses ; so, as soon as it is dark, every one goes to bed.

Most of the men of the village are away from home much of the time. Some of them are with the caravans, driving the yaks and ponies ; some of them are hunting the small deer from which musk, one of the important exports of Tibet, is obtained ; some of them spend their time in repairing guns and kettles, making and mending saddles and bridles, and doing other odd jobs. Women as well as men work on the little rocky farms, raising rhubarb to be sent over the long route to China, cultivating the stunted grain and the few vegetables that will grow in this bleak land, and watching and milking the flocks. Of all their animals the yak is the most common and the most valuable to the people. They drink its milk, eat its flesh, weave cloth of its hair, and load burdens on its back. It is a curious-looking animal, reminding one of a buffalo with skirts on, as its hair is so long and thick that it hangs nearly to the ground. In the summer the yaks, sheep, and goats must all be sheared, and the wool packed for export or cleaned and spun for weaving. In every house is a rude loom on which the women weave the coarse cloth which is used for tent coverings and for clothing. In all of the work which is carried on the women have an important place. They rule in the household, and theirs is the deciding voice in any buying or selling which is done.

The boys and girls find plenty to do even if they have no schools to go to and no books to read. They fetch the water for cooking from the brook or well. They blow the

fire with a bellows made of a goatskin and stir the food boiling in the fireplace. They wander for hours over the plains and mountains, collecting fuel, for little wood is to be found on the high, dry plateaus of Tibet, and everything which will burn is used to feed the fire. When they are



FIG. 36. OF ALL THEIR ANIMALS THE YAK IS THE MOST COMMON AND THE MOST VALUABLE

older they will watch the flocks and herds, milk the animals, and dress skins. When the girls are quite young they learn to spin and weave, and the boys to ride and shoot. They have few games but find some time to race and slide, to practice throwing stones at a target, and to cast the sling shot. Their fun soon ends, as when still

very young they are obliged to join their parents in their hard fight for the necessities of life.

The religion of Tibet might almost be classed among the occupations of the country, as nearly a fifth of the people are in some way connected with its observances. In every family one or more of the boys become priests, or lamas, as they are called. In traveling, one meets lamas everywhere, and in the city of Lhasa alone there are more than twenty thousand. They live by themselves in communities called lamasaries, some of which are as large as small towns. The lamas are a burden to the country, as they are supported entirely by the rest of the people, over whom they have a great influence, much of it won through trickery and deceit. Education is wholly in the hands of these priests, and as it is easy to deceive people who are ignorant, the lamas are careful to keep their followers in that condition.

The Tibetans are followers of Buddha, and believe that the Grand Lama of Lhasa, the ruler of the country, is a god closely associated with Buddha himself. Consequently he is worshiped by all, and the place where he lives is very sacred in their eyes. This is the reason why Lhasa is regarded with so much reverence by all Buddhists, in whatever country of Asia they may live, and why thousands of them are willing to make any sacrifice and undergo any hardship for the sake of once visiting it. From every town on the border of Tibet a road (if the narrow paths which serve as highways can be called such) leads to Lhasa. From every neighboring country a traveled route takes one to the sacred city.

The Grand Lama, or the Dalai Lama, as he is called, is usually a child or a young boy, and the government is

really in the hands of a body of men who use him and his influence for their own benefit. He seldom reaches manhood, but, just when he begins to have a mind and a will of his own, usually disappears, and a new god, found by some miraculous invention of the lamas among the children of Tibet, takes his place.

Lhasa, the capital, is the center of interest in the country. It has often been called the Mysterious City, and for many years it was the goal of ambitious travelers, who in various disguises attempted to enter it. So watchful were the people, and so cruel were the punishments they inflicted on strangers, that up to the time of the English expedition from India in 1903 less than half a dozen white people had ever been within its walls. Now, however, travelers may visit the city, the sacred temple, and even the palace of the Grand Lama. The mystery and the charm of the unknown have disappeared, leaving in their place a knowledge of the filth of the city and the ignorance of the people.

We approach Lhasa through a pleasant country, where willows grow in green meadows beside clear flowing streams, where marshes, alive with wild ducks, and fields of oats and barley stretch away to the distant hills. When still a long distance from the city we can see glittering in the sunshine the great palace of the Grand Lama, which for more than a thousand years has marked the most sacred spot in eastern Asia. It is surrounded by fortifications, temples, and monasteries, and a fine avenue lined with trees leads from it through the city gates to the temple. This is the only decent street in Lhasa. All the others are narrow, dirty lanes in which pigs and dogs wander, searching for food in the piles of ill-smelling refuse. On either side stretch



long rows of low houses built of brick or stone and covered with whitewash. On the inside, however, everything white has long since disappeared under smoke and dirt. In the center of Lhasa, surrounded by bazaars and shops, is the temple, the goal of thousands of Buddhist pilgrims. From all the buildings, shops, houses, and the temple itself waves a motley collection of prayer flags, giving to the city the appearance of having what it very much needs — a general wash-day.

Many of the houses are brightened by a box of gay-colored marigolds and a song bird in a wicker cage. Here a baker is kneading his huge lumps of dough, unmindful of the dust which a heavily laden yak raises as he goes slowly by. Near the door of her low hut a woman is weaving a bright-colored rug. In that dark little house an incense maker is fashioning for the temple worship some incense sticks which give a delicious odor that is very welcome after the noisome smells of the street. Farther down the lane a brass molder bends over his heated metal, and near by a smith toils at his forge. The manufactures of the city are few and unimportant and are confined to some common articles used by the people in their daily work.

A country so bleak and barren, so difficult of approach, so sparsely populated, so lacking in agricultural wealth, would seem of small importance, and you probably think that the great nations of the world are but little interested in Tibet and its people. In this you are mistaken, as England and Russia, two of the most powerful nations in Europe, are much interested, both in the country itself and in peering across it at each other. England, you remember, controls India on the southern border of Tibet, and to the

north lies the Russian territory. Because it lies between the possessions of these two important nations, Tibet is sometimes called a buffer state. Each of these ambitious countries has for years kept a watchful eye upon the movements of the other—the English to see if the Russians make any southern step through Tibet toward their Indian possessions, and the Russians to ascertain whether any northward advance of the English threatens their influence in northern Asia.

It was partly to make sure that the Tibetans made no treaties with Russia which would give that nation a foothold farther south, and partly to develop trade in Tibet, that England sent the military expedition referred to from India into the hitherto forbidden land. With much difficulty the soldiers made their way through the mountain passes up to the high plateau and into the sacred city of Lhasa. The small company of English were far outnumbered by the Tibetans who opposed them at every step, but the superior discipline and weapons of the invaders made their progress an easy matter.

In Lhasa the government was forced at the point of the sword to sign a treaty of peace, if one can call it such. In this treaty the Tibetans were obliged to agree to destroy all their forts on the Indian frontier, to establish markets for trade with India, and to pay the English government more than two million dollars; most important of all, they had to promise not to lease or sell or mortgage any of their territory to any other nation, not to make treaties, not to allow anyone to interfere in any way with the government or to develop mines or build railroads without the knowledge and advice of England.

The English now feel safer about the northern border of their Indian possessions. Whether or not the Tibetans are satisfied, nobody seems to ask. Strong nations all over the world have always made treaties of peace with weaker ones in a similar fashion. Doubtless it is much better for the people of Tibet to be looked after by a progressive nation like England than to live as they have done heretofore, shut off by their mountain doors from the rest of the world.

North of Tibet and separated from it by the lofty Kuenlun Mountains lies the Chinese province of Turkestan, often called Eastern Turkestan to distinguish it from the Russian province of the same name which lies west of the Tien Shan Mountains. Chinese Turkestan is larger than Tibet. If a map of it were laid on that of the United States, it would cover the states of Texas, Louisiana, Arizona, and New Mexico. It is very thinly peopled, however, for it contains fewer inhabitants than the state of Louisiana alone. It is for the most part a dreary, barren land surrounded on three sides by mountains and merging on the east into the great Desert of Gobi. It is of little importance save for the fact that it lies in the path of the trade routes between eastern and western Asia.

Little or no rain falls in Turkestan, and the only farms lie in the valleys near the rivers, where water may be obtained for irrigation. Probably you have never even heard the names of these rivers, which, because they make possible the little life which is found in central Asia, are of the greatest importance. The Tarim River, about a thousand miles long, is the chief one of the region, and all the permanent cities and towns are situated on it or its branches. Most of the people live in its valley, though

wandering tribes, who dwell in tents and keep large flocks and herds, roam over the more desolate parts of the country. In the summer some of the men drive the animals to the higher lands for pasturage while others remain in the oases to care for the little fields of grain and the patches of beans and melons. Their farming is carried on in the simplest fashion, and their crops are scanty. At one end



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FIG. 37. THE FARMER DRIVES HIS OXEN OR DONKEYS, OR PERHAPS A CAMEL AND A DONKEY, OVER THE SCATTERED GRAIN

of the village stands the threshing floor, beaten hard by use. The farmer strews the ground thick with his sheaves of wheat or barley and then drives his oxen or donkeys or perhaps a camel and a donkey round and round over the scattered grain until

they have broken the dry straw into bits. When a windy day comes, the men toss the grain high in the air and the chaff is blown to one side while the heavier grain falls to the ground in a pile by itself. This is used as a food for the people and in the winter for the horses and cattle, though during much of the year they have to forage for themselves. The summers are hot and the dust blows in clouds; the winters are cold and the winds fierce. Living in the open in such a climate, the animals become hardy and tough. The horses are especially noted for their endurance and their ability to get along with little food.

As one travels over the desert these little settlements, shaded by poplar and mulberry trees and surrounded by green fields, are very conspicuous against the brown, barren waste which stretches away on every side. There are not very many of them, however, and the distances between them are so great that the people of the desert always ride on donkeys or ponies. Yaks are not used here, as they are unable to endure the summer heat, which at this lower level is much greater than in Tibet. Camels are used, especially in the winter, to make long trips across the desert, and donkey carts are common.

You will be surprised to find large cities in such a land

as this. Yarkand, with nearly a hundred thousand people, Kashgar, with sixty or seventy thousand, and Khotan, with forty thousand, are important trading centers for merchants from China, India, Bokhara, and Russia. In each of these cities, after passing through the gate in the mud wall, you will see dirty streets, low mud houses, and crowded bazaars.



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FIG. 38. THE FARMER SELECTS A WINDY DAY AND TOSSES THE BROKEN STRAW HIGH IN THE AIR

The sights on a market day are especially interesting, for then the people for miles around have ridden from the little farms nestling close to the life-giving stream to buy or sell or to enjoy the crowd. We see ponies everywhere, some with packs on their backs and led by their owners,



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FIG. 39. ON MARKET DAY THE PEOPLE FROM THE LITTLE FARMS FOR MILES AROUND RIDE INTO THE BAZAARS

who are clad in dirty sheepskin, and others ridden by wild-looking men with long, tangled hair and beards or by women wearing heavy fur hats or big white head-dresses. There are ponies harnessed to queer-looking wagons, while others with no burden to bear or load to draw are waiting for new owners.

Among the crowd you will see dark-skinned people from the southern borders of Turkestan carrying bags of musk, and sunburned men from distant oases sitting comfortably on mounds of sheepskins and goatskins piled high on the backs of patient donkeys. They will exchange these for cheap tea, bright-colored silks, and gayly figured cotton cloth brought by patient camels over the desert from the Far East. Mingling with the crowd and adding to the noise and confusion are water carriers, beggars, story-tellers, and jugglers. You can see the coppersmith hammering sheets of metal, saddlers working on great sides of leather, weavers making coarse carpets, and cooks stirring mutton puddings flavored with the dust of the street, while "the butcher, the baker, and the candlestick maker" ply their trades in the low open shops.

## TOPICS FOR STUDY

### I

1. The divisions of the Chinese republic.
2. Situation and size of Tibet.
3. Reasons for the isolation of the people.
4. Trade routes into Tibet.
5. Life in western Tibet.
6. Trade between China and Tibet.
7. Life in eastern Tibet.
8. The religion of Tibet.
9. The city of Lhasa.
10. Interest of other nations in Tibet.
11. Situation of Chinese Turkestan.
12. Importance of the rivers of Turkestan.
13. Life in Turkestan.
14. Important cities of Turkestan.

## II

1. On a map of Asia, show the five chief divisions of the Chinese republic.

2. Sketch a map of Tibet and Turkestan. Show the mountains dividing and surrounding them. Add the rivers, the chief trade routes from neighboring countries, and the cities spoken of in the chapter.

3. What is meant by a buffer state?

4. Find in the encyclopedia what musk is and how it is obtained.

## III

Be able to spell and pronounce the following names. Locate each place and tell what was said about it in this and in any previous chapter.

China	Khotan
Mongolia	Kashgar
Manchuria	Leh
Russian Turkestan	Mekka
Chinese Turkestan	Jerusalem
Tibet	St. Louis
Kashmir	Philadelphia
Bokhara	Yangtze River
Russia	Tarim River
England	Yarkand River
India	Kuenlun Mountains
Lhasa	Tien Shan Mountains
Yarkand	



## CHAPTER VI

### AMONG THE MONGOLS

Let us next visit one of the northern provinces of the Chinese republic. Mongolia is nearly as large as China itself, but it is as different as it can possibly be. China is fertile, covered with farms, and crowded with people; Mongolia is barren and has scattered farms and a sparse population. We shall find the Mongols very interesting, however, and a visit to their country will more than repay us for the difficulty of getting there.

Our best way of entering Mongolia is from Peking over the great trade route which leads from China to Siberia. What will you choose for your conveyance? You can go, if you like, in a chair or a sort of curtained box with long shafts at either end, somewhat like the one shown in Fig. 40, carried by coolies or mules. The road is only a rough path full of deep ruts and holes, and you will find that at times one of your mules is deep in a mudhole while the other is scrambling over large boulders, and the litter, with you inside, is tipping at a dangerous angle. No railroad penetrates this desolate northern region, and no carriage could be drawn there, but if you prefer, you can ride on the back of a donkey or you can join a camel caravan. You will have no difficulty in finding one, for outside the walls of Peking there are hundreds of camels waiting to start on their long trip.

The rock-strewn, uneven path which we must follow is one of the most important highways of all Asia, and for centuries has been traveled by mules and donkeys, camels



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**FIG. 40. YOU CAN RIDE IN A CHAIR OR SORT OF CURTAINED BOX  
CARRIED BY COOLIES OR MULES**

and coolies. Millions of dollars' worth of tea, sugar, tobacco, cotton, and silks are carried northward over it annually, and loads of furs and skins, soda, salt, and lumber are

brought by this route to Peking. We shall not find the trip a lonely one, for ahead of us and behind us there are long lines of camels swinging silently along. We halt for a time at Kalgan, a busy, crowded place where hundreds of camels are resting before continuing their long journey, and where nearly all of the people are connected in some way with the caravan trade which passes through it.

On the narrow, uneven streets we meet, coming from the north, long trains of camel carts filled with soda. We see



FIG. 41.. WE MEET LONG TRAINS OF CAMEL CARTS FILLED WITH SODA

also heavy ox carts piled high with skins or carrying heavy loads of lumber. They are driven by Mongols in dirty sheepskins, who will exchange their loads for food, cloth, cooking utensils, or perhaps for a new saddle. Many people from the surrounding country have come in on horseback, and after fastening their purchases upon the backs of their shaggy ponies they mount also and ride away.

Kalgan is just inside the Great Wall which the Chinese people built centuries ago to keep out the fierce tribes of the north, among them these very Mongols into whose

country we are going. There are walled cities in many parts of the world, but who ever heard of a ruler who, in order to keep his enemies out, built a wall around his empire? Yet the Great Wall extends along the whole northern border of China for more than fifteen hundred miles. It climbs the tops of the highest mountains and dips down into the deepest valleys. It averages more than



**FIG. 42. THE GREAT WALL EXTENDS ALONG THE WHOLE NORTHERN BORDER OF CHINA**

twenty feet high and twenty feet thick, and at intervals of a few hundred feet it is surmounted by towers fifty feet high, where watchmen were stationed.

Can you imagine the thousands of poor Chinese coolies who toiled and suffered and died while the great structure was building? Can you picture the tall towers filled with archers, and the arrows from the twanging bows flying at the hordes of northern tribes as they struggled for entrance

into the southern kingdom? The Great Wall and the Grand Canal of China are two of the wonders of the world. They tell, perhaps more plainly than any other relics, of the strength and development of the Chinese Empire when European nations were barbarians and when America was yet undiscovered.

Passing northward through a gate in the Great Wall, we find ourselves in Mongolian territory. For some distance the country appears much like northern China, fertile, well wooded, and hilly. As we go farther north the farms grow more and more scattered and the people fewer, until, when three days' journey by camel caravan from Peking, we find ourselves on the edge of the Desert of Gobi, which occupies a large part of Mongolia.

Perhaps no greater contrast can be imagined than the busy, noisy, crowded capital of China which we have left behind and the dreary, empty, silent land before us. The Desert of Gobi is one of the most desolate areas in the whole world. It is a part of an immense barren area which extends through the Eastern Hemisphere from the Atlantic border of the Sahara desert in Africa over the sands of Arabia, Persia, Turkestan, and Mongolia nearly to the Pacific Ocean. The winter winds from the northwest deposit their moisture on the northern and western slopes of the high mountain ranges which border these sandy wastes on the north; the summer monsoon winds from the south and east leave their life-giving drops on the seaward slopes of the highlands south of the desert. As a result of this lack of rainfall there is no settled life in Gobi. Wandering tribes with their flocks and herds dwell in the oases, but in the greater part of its vast area there is no water, plant,

or man. The fierce glare of the sunshine on the hot sand is almost intolerable; the dust-laden wind sweeping down between the mountain ranges cuts the face like a knife; the bare hills, the empty watercourses, and the skulking wolves make the region a forbidden one; and, with the exception of the caravans which cross it, its solitudes are broken only by the few miserable tribes who live there.

Swaying on our camels, with our faces protected from the fierce wind, we make our way steadily northward for six hundred miles, until at last we arrive at Urga, a Mongolian city of about thirty thousand people and the center of the caravan trade between China and Siberia. On our right as we approach the city we find the low houses, the crowded streets, and the heavily laden wheelbarrows of the Chinese; on the left is the Mongolian section, with numerous temples, flying prayer flags, and curious prayer wheels at every corner. Between them, most conspicuous of all the buildings in the city, stands the Russian consulate. The Russians control the caravan trade to Siberia, and many Russian merchants live in Urga. Here the tired camels, dropping their loads of tea, cotton, sugar, tobacco, leather goods, and iron and copper utensils, rest for a time and then reload with hides and skins, lumber, soda, and salt, and start back over the bleak plain on their weary homeward journey. Others, laden with the products which have been brought from the south, go northward through the wooded hills and mountains which lie between Urga and the Siberian city of Kiakhta, two hundred miles away.

If we wish to see the real Mongol and become acquainted with his life and habits, we must leave the trading centers and go out into the country. People traveling on long

journeys in Mongolia often go on camels or in slow, lumbering oxcarts, but as we are to make only a short trip, we will find it more convenient to go on horseback. Everybody rides in Mongolia—rich and poor, men, women, and children. As the little settlements are separated by miles of desert waste, no one ever thinks of walking.



FIG. 43. IN URGU WE SEE THE HEAVILY LADEN WHEELBARROWS OF THE CHINESE

Only those people who live in the few cities have settled homes. Most of the Mongols camp for the winter in some spot where water can be obtained, and during the summer move from place to place to find pasturage for their flocks and herds. The women and some of the men remain at the camp to care for the few crops—the grain, beans, and melons—which are raised there during the warm months.

As robbers are not uncommon, we must have a guard for our trip through Mongolia; we shall need a guide also, as we shall be unable to find our way through the trackless open country. We may journey for hours without seeing any sign of life. In the distance we may perhaps catch a glimpse of a flock of sheep on the hillside or a herd of deer browsing in a green valley. We may chance upon a drove of wild horses which, startled at our approach, gallop off across the plains with flying manes and tails. We may meet a lama twirling his prayer wheel or telling his beads, for lamas, prayer wheels, and temples are as common in Mongolia as in Tibet. We shall be sure to see a drove of black pigs making a cloud of dust as they are hurried along to some trading center, and farther away, showing black against the clear sky, a long, silent caravan of tea-laden camels.

Here is a Mongol camp ahead of us. Horses, sheep, and goats are feeding around the inclosure inside of which are the round black tents of the people. A number of dogs, barking furiously, rush out to meet us. They are as good as a doorbell, for here come the people aroused by the noise. How queer they look! The women and men dress very much alike, and it is hard to distinguish one from the other. Both wear loose trousers, high boots, and long coats which come nearly to the ground. The only difference in the costumes that we can see is that the robes of the men are belted in at the waist, while those of the women hang loose. Whenever they stoop down to milk, to tend the fire, or to do any other work, their cloaks drag in the dirt, and consequently they appear rather dirtier than the men, if such a thing is possible. In the winter all clothing is made



of sheepskin, as neither wadded cotton nor wool is sufficiently warm when the temperature runs from twenty to forty degrees below zero.

Because of their own necessities, Mongols have learned to be very hospitable, and at their invitation we dismount from our horses. There are no inns in the country, and the homes are the only places of shelter for travelers, who are always warmly welcomed and given the best that the house



FIG. 44. THE TENTS ARE CIRCULAR IN SHAPE

affords, though to our Western eyes the best is exceedingly poor. We are curious to see the inside of a Mongol's tent, but we must pay for our curiosity by enduring the bad air which greets us as we enter; unwashed people, badly dressed skins, mangy dogs, newborn lambs and kids, and the contents of the kettle boiling over the fire make a combination of odors which it would be hard to equal.

The tent is circular in shape and is made of a framework covered with a coarse, dark felt. It has a wooden floor except in the center, where a fire is burning directly under the smoke hole in the top of the tent. Some of the people are beginning to build houses heated by great brick stoves

such as are used in Russia, but most of the inhabitants still live in these cold, uncomfortable tents. We are invited to join the family circle, and we take our seats with the others on the edge of the floor, with our feet on the ground near the fire. The position is not uncomfortable, as we can lean back against the trunks and boxes in which the goods of the family are kept. The Mongol has few clothes except what he has on, and few cooking utensils except those over



FIG. 45. THE MONGOL MOVES OFTEN

the fire. He moves often, and all the goods which he cannot conveniently carry he buries in the ground, where they remain until he comes again to that place.

The men of Mongolia, though good-natured and hospitable, are not inclined to work very hard. Some of them are caravan drivers, some tend the flocks and herds, a few are away working in the salt mines and soda mines, and some spend their time in hunting and trapping in the parts of Mongolia which are far enough north to be included in the region where valuable fur-bearing animals live.

The Mongolian woman has a much harder life. Her bed is the farthest from the fire, where the cold creeps in under the edge of the tent; her cover of felt is the thinnest and poorest; her food is what remains in the kettle after the men's appetites are satisfied; her work begins in the morning before the men are awake and ends late at night after the others are asleep. She prepares the food, milks the animals, dresses the skins, gathers the fuel, feeds the dogs, makes the clothing, brings the water, works in the fields, and rears her children. In the East women are not treated with the same respect as is shown to them in the Western world. All this must be changed before these nations can progress very far on the road to civilization.

## TOPICS FOR STUDY

### I

1. Transportation in Mongolia.
2. Trade route from China to Siberia.
3. Description of Kalgan.
4. The Great Wall of China.
5. The Desert of Gobi.
6. Description of Urga.
7. Life in Mongolia.

### II

1. Sketch a map of Mongolia and the surrounding countries. Show on it the Desert of Gobi, the Great Wall of China, the trade route from Peking to Kiakhta, and the important trading centers.
2. Name as many differences as you can between China and Mongolia.
3. What are monsoon winds? How do they blow? What are their effects on the countries over which they blow?

4. On a map of the Eastern Hemisphere show the desert strip extending through Africa and Asia to the Pacific Ocean. Write the names of the countries included in it.

5. Use the scale of your map and measure the distance from Peking to Kiakhta. Compare it with some distance in the United States.

### III

Be able to spell and pronounce the following names. Locate each place and tell what is said of it in this and in any previous chapter.

China

United States

Siberia

Arabia

Persia

Turkestan

Desert of Gobi

Sahara desert

Atlantic Ocean

Pacific Ocean

Kalgan

Urga

Kiakhta

Peking

## CHAPTER VII

### MANCHURIA, GIANT RUSSIA, AND LITTLE JAPAN

In the northeastern part of the Chinese republic is the province of Manchuria. We shall find a visit to this land, the original home of the Manchus, an interesting one, as the country is very different from the dreary Mongolian plain which we have just left. In recent years no part of Asia has been more talked of, more overrun with soldiers of different nations, or more changed in many ways than Manchuria. Perhaps it is because of its position at the meeting place of Russia, China, and Japan that it has been so much involved in the quarrels of these countries. Russia is so closely connected with these troubles that in order to understand them we must know something of her history and ambitions.

Centuries ago Russia was not the great nation that she is to-day, with a vast territory stretching from the Baltic Sea in Europe to the Pacific Ocean on the eastern border of Asia. At that time the frozen Arctic was her only water front; the Swedes held the land between her and the Baltic Sea, and the Turkish possessions, much larger than they are at the present time, included the northern shores of the Black Sea.

Knowing that a people can never become a great commercial nation without easy access to the ocean, Peter the Great and other rulers gradually enlarged their territory

until the Black and Baltic seas washed Russian soil and the cities on these waters became Russian seaports. As the great empire slowly developed, each ruler realized more clearly than the one before him the advantage of having seaports on the open ocean instead of on inland seas whose narrow entrances were controlled by other nations.

The Danish city of Copenhagen lies at the mouth of the Baltic Sea, and Constantinople, the Turkish capital, controls the entrance of the Black Sea. Russia might easily conquer these weaker countries and obtain possession of these important strongholds if other European nations were willing; but the Great Powers prefer that a strong nation like Russia should not have the entire control of these two great inland seas and thus be able to develop her own commerce and her own interests at the expense of other peoples.

When it became known that large parts of Siberia were fertile, that the mountains abounded in minerals, and that the forests and furs might become sources of immense wealth, Russia turned her attention to eastern waters and connected them with her western cities by the Trans-Siberian Railroad. Vladivostok, the most southern city in Siberia possessed of a good harbor, was made the terminus of the railroad. Unfortunately its harbor is ice-bound during the winter, and commerce is thus hampered as in Riga and Petrograd (formerly St. Petersburg).

Still intent on her purpose of obtaining an ice-free port on water which she might control, Russia asked, or rather forced, permission from China to build a railroad branching southward at Harbin from her main Siberian line, passing through the entire length of Manchuria and ending

at Dairen on the southern end of the Liaotung peninsula. You will find these places given on the map opposite page 9, and you can understand that this southerly ice-free outlet was an immense advantage to Russia in her trade and commerce.

With the railroad to help her, and with other privileges in industries and commerce which China was forced to yield her, there was little doubt that, had not another nation become interested in the matter, Manchuria, like so many parts of Central Asia of which you will read later, would sooner or later have become a part of the great Russian Empire.

Bordering Manchuria on the south lies Korea, a country larger than the state of Minnesota, with valuable forests, stores of minerals, and much fertile land, and with ports even farther south than those of Manchuria. Very quietly, and with few people realizing what was going on, Russia obtained from the Korean government certain important lumber privileges. She sent hundreds of Russian peasants into the deep Korean forests, and built on the Yalu River, the boundary between Manchuria and Korea, one of the largest saw-mills in the world. Then what was more natural than for Russia to order her soldiers into Korea, to protect her lumbermen who were living there? Although by this time the nations of the world realized that this was only another southward step of the great Russian bear toward better harbors and warmer waters, none of them interfered and things went quietly on. Little Japan objected very earnestly to this Russian entrance into Korea, but no one paid much attention to her—least of all, Russia, for what could a little nation like Japan, occupying an

area about that of California, do against an empire nearly three times as large as the United States?

But, you ask, why should Japan object? To answer that question let us drop the story of Russia for a time and see what Japan has been doing all the time while the Russian bear has been creeping closer and closer to her Island Empire.

Japan is about the size of Pennsylvania, Ohio, Indiana, and Illinois, yet her population is more than half that of the entire United States. More territory and greater opportunities in neighboring countries to increase her trade are absolutely necessary to her in her future development.

Korea was long a buffer state between China and Japan, ruled sometimes by one country and sometimes by the other. The two nations had made a treaty concerning Korea, in which it was agreed that it should remain independent, that both China and Japan should have certain commercial privileges there, but that neither should send armed troops into the country without notifying the other. In 1894 China violated this treaty, and Japan immediately made war upon the country nearly thirty times as large as herself. The world held its breath at the sight, most people expecting to see the little Island Empire crushed by the Chinese, but to their astonishment Japan won every victory, and, at the close of the war, which lasted between one and two years, was able to make terms favorable to herself in the treaty of peace.

According to this treaty Korea was to remain independent; China was to pay Japan a large sum of money, was to cede to her the island of Formosa, was to keep her hands off Korea, and, more important than all, was to give to her



the Liaotung peninsula in southern Manchuria, with full control of its seaports. By this treaty Japan gained what she had so earnestly desired — room for her crowded empire to expand and ports through which she might foster her trade with the interior of the continent.

You can imagine Russia's dismay when she learned that the Manchurian ports, which she had had in mind all the time that she was building her railroad, were now to belong to Japan. Russia realized that if Japan held Manchuria, her own southward progress toward ice-free ports was checked. She would not willingly give up this great project of hers and all that she might gain by her railroad to Dairen. What to do was the question. England was a friend of Japan, and though Russia was willing enough to fight Japan alone, she dared not take any steps which would bring on trouble in Europe between herself and the British. So she went to work in another way. What she whispered in the ears of France and Germany was something like the bargain of the small boy who says, "Give me a bite of your apple and I will give you some of my candy." Together the three great powers sent a courteous note to Japan, which said in effect that it would not be best for the peace of the continent that an island nation like Japan should control a part of the mainland; that Korea might be independent, as had been planned in the treaty; that Japan might have the money which China was to pay her, and that she might keep the island of Formosa; but that she could not have any part of Manchuria and must withdraw from that country directly. Poor Japan, thus robbed of the best fruits of her victory, meekly said, "All right." What else could she do? England did not come to her

assistance, and of course it was useless for her, weakened as she was by the war with China, to think at that time of fighting those three strong nations, or indeed any one of them; so she withdrew her soldiers from Manchuria. Quietly she strengthened her army and navy, and she watched—oh, so carefully—every move of the Russians. She saw them creeping southward on the railroad from Harbin; she saw them building the city of Dairen; she saw their lumbermen cross the Yalu River into Korea, and she saw the soldiers follow. She had held her peace while Manchuria became more and more controlled by the Russians, but Korea—the country about which she had fought with China, the peninsula which almost touched her own shores, the land which, if properly developed, might serve as a successful buffer state between her and the continental nations—Korea should never belong to Russia; Japan would make it a part of her own empire first. And so when, in 1904, the Russian soldiers crossed the Yalu River into Korea, the little island country sent a message to the Russian government, "Take your soldiers out of Korea or fight." A tremendous challenge, was it not, from a dwarf to a giant? Again the eyes of the world were turned to the East in amazement at what seemed to be such an unequal struggle, for in this case Japan was fighting against an empire fifty times as large as her own. Russia, however, fought under a great handicap because of her distance from home, and after months of warfare the Japanese gained the advantage, though neither side was willing to give up the struggle. President Roosevelt used his influence for peace, with the result that the war came to an end and the treaty of peace was signed at Portsmouth, New Hampshire.

By this treaty Japan was allowed to control the Liaotung peninsula, and all the rest of Manchuria was restored to China. Russia agreed to withdraw from Korea and not to interfere with anything that Japan might do there, and the enterprising Japanese soon set about improving and developing the land which was now a part of their empire.

Many people think that Russia has not yet given up her quest for ice-free seaports, even though it seems at the present time that they will not lie on the Pacific Ocean. The Caspian Sea, which is entirely controlled by Russia, is only five or six hundred miles from the Persian Gulf, and in the chapter on Persia we shall see what Russia is doing in that part of the world.

Now let us take a short journey into Manchuria and see what kind of region this disputed province, once and a half the size of Texas, really is. It contains splendid forests which for many years will supply immense quantities of building material; in these forests live many fur-bearing animals—the sable, squirrel, otter, wolf, fox, and bear; the rivers and coast waters teem with fish, and on the grassy hillsides many thousand cattle, horses, sheep, and goats can find pasturage; in the fertile valleys is some of the finest agricultural land in the world, waiting only for the farmer's hand to make it produce wonderful crops.

On the northern border of Manchuria flows the Amur River, a waterway about as long as our own great Mississippi, and navigable from May to October. Through the country flow the Sungari and the Liao rivers, both navigable during the warm months and draining rich farming lands. On the coast are cities with good harbors—Newchwang, Dairen, and Port Arthur, the two latter ice-free during the

entire year. Not much more than a fifth of Manchuria is at present under cultivation, and on her undeveloped land there is room for thousands of colonists. To the south, China and India, crowded with millions of people, are demanding in greater quantities each year the grains which Manchuria can supply. Across the Pacific Ocean our great



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FIG. 46. IN THE VALLEYS OF MANCHURIA IS SOME OF THE FINEST AGRICULTURAL LAND IN THE WORLD

Western cities are ready to furnish farming tools, machinery, and clothing materials which for many years Manchuria must import. It is no wonder that Russia desired to possess such a fertile region. It is no wonder that Japan also wished to control the ports and increase her trade with the land so near her, which in the future may become the greatest wheat producer, the largest lumber yard, and the richest gold-mining center of eastern Asia.

Our easiest method of travel through Manchuria is by train. A railroad follows the Liao River valley, the most densely populated and best-cultivated part of the country. We will start from Port Arthur, the Gibraltar of the East. This city and its fortress, situated at the extreme southern end of the Liaotung peninsula, is the place so long defended by the Russians and at last so bravely taken by the Japanese. Surrounded by a circle of hills and possessed of a fine harbor with a narrow, well-protected mouth, Port Arthur is splendidly situated to guard the approach to Manchuria from the south.

It is hard to tell, from the appearance of the city, in what country we are. Everything in the Russian quarter is just like Russia, in the Japanese portion like Japan, and in the Chinese settlement like China. We can ride in a man-drawn Japanese jinrikisha, a Russian drosky, or a Chinese cart. As our time is limited, we will use none of these conveyances but will start northward in a train drawn by a locomotive made in Philadelphia.

Did you ever hear of a made-to-order city? Forty miles northeast of Port Arthur is Dairen, a fine city with broad streets, great warehouses, imposing public buildings, and many modern conveniences. Yet at the beginning of this century the city of Dairen did not exist. The Russians, when searching for an ice-free port which should also be the southern terminus of the greatest railroad in the world, selected this spot in Manchuria, and a small army of Russian workmen, by command of the czar, Nicholas II, began the work of creating a city, just as Russian laborers in the early part of the eighteenth century, at the direction of Peter the Great, built St. Petersburg (now Petrograd).

Dairen has a splendid harbor well equipped with all modern conveniences for carrying on commerce and large and deep enough to accommodate ocean steamers. It has already become an important commercial port and is destined for



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FIG. 47. AT THE BEGINNING OF THIS CENTURY DAIREN DID NOT EXIST

greater things in the future, as Newchwang, the other chief seaport of Manchuria, two hundred miles farther north, is closed by ice for four months of the year. It is the Japanese, however, who are controlling much of the commerce which Russia fondly imagined would pass through her hands.

Our ride through southern Manchuria takes us through a country very similar to northern China. We see the fields of millet, the rows of poplar trees, and the crowded villages with narrow streets and dirty houses inhabited by ignorant,



FIG. 48. ROAD-MAKING IS UNKNOWN IN MANCHURIA

superstitious people — all very similar to the fields, villages, streets, and houses of the more southern regions.

When we see the roads, or the gullied, stony paths which pass as such, we are glad that we decided to travel by train. Road-making is unknown in Manchuria. In summer,

the season when the country receives most of its rain, the highways are so muddy as to be impassable. Most of the traffic is carried on in the winter, when the ground is frozen and when the clumsy, heavily loaded teams can take a direct line across the fields without injuring the crops.

We will stop for a little while at Newchwang, which, though icebound for three or four months of the year, is one of the chief ports of Manchuria. Down the Liao River, and on the railroad which follows its valley, pours the wealth of Manchurian farms. A forest of junks lies in the river, and the scenes on the banks show the bustle, confusion, and noise which are always found where crowds of Chinese work together.

Newchwang does not impress us as a very beautiful or a very interesting place. It is surrounded by dreary, flat marshes on which the making of salt from sea water is the chief occupation. See those large buildings down by the river. Those are bean factories, where bean oil and bean cake are made. The Manchurians must like "bean porridge hot, bean porridge cold, and bean porridge in the pot nine days old." Beans of all colors and sizes are raised and eaten everywhere in the country. They are dried and pickled and boiled; they are made into flour, into a paste something like macaroni, and into bean curd, a favorite dish with most of the people. Beans are also pressed for the oil which they contain, and this is used for cooking and lighting; the cake which is left is not wasted, but serves as a cattle food and fertilizer. If we could examine the cargoes of the junks in the river and of the steamers which lie in the harbor bound for Japan, England, and the United States, we should find some bean product on every one.



Not all the beans raised in Manchuria or the products obtained from them are shipped from the southern ports of Dairen and Newchwang. The output of the more northern farms is sent out of the country by rail to Vladivostok, the terminus of the Trans-Siberian Railroad, and thence across the Japan Sea to Japan, where large quantities of beans are used.



FIG. 49. BEANS, BEAN CAKE, AND BEAN OIL ARE SHIPPED FROM MANCHURIA IN GREAT QUANTITIES

Look at that line of carts piled high with dried millet stalks. This is the chief fuel of Newchwang. It is much cheaper than wood and does very well for the little fire which the people use for their cooking.

There come some coolies, each with a pile of small, dark skins on his back. They have come from the dog and goat farms in the northern parts of Manchuria, where the

animals are raised as sheep and cattle are, and are killed in the winter when the fur is heavy. The skins are brought in carts over the frozen fields to Mukden, Kirin, and smaller trading centers, where they are dressed. They are then shipped down the river to Newchwang, whence they are sent to other countries to be made into mats and coats.



FIG. 50. LIKE THE CITIES OF CHINA, MUKDEN HAS ITS LOW HOUSES, ITS DIRT, AND ITS SMELLS

Like the walled cities of China, Mukden has its gates, its low houses, its dirt, and its smells. It is a busy city at all times, but there is more traffic in winter than in summer. To be sure, the winters are cold (the temperature often falling more than twenty degrees below zero), but neither the fur-clad people nor the shaggy ponies which live out of doors in all kinds of weather seem to mind it.

Mukden is an important fur-dressing center, not only for the skins from the dog and goat farms but for the more valuable furs for which Manchuria and Siberia are noted. Many fur-bearing animals, such as the sable, fox, squirrel, otter, and bear, live in the deep forests, and hundreds of men find employment in trapping them during the long winter months. Other parts of animals besides the skins are often useful. The horns and hoofs of the deer are dried and then ground into a powder, which is used in China as a medicine. Some of the native Chinese druggists carry a queer stock in trade. If you were sick, you might not object to a dose of rhubarb, which is a favorite remedy, but how would you like to take some ground tiger-bones or powdered deerhorns?

On account of the bad condition of the roads it would not be easy to travel through Manchuria in the summer. If we did, we should meet few teams and few people. During the warm season the people work on their little farms and do not try to carry their produce to the large centers until the frost makes the muddy roads passable and turns the river into a broad, smooth highway. In the winter we should meet around Mukden hundreds of carts loaded with grain, fur, lumber, and meat. These goods are stored in the city until the river opens in the spring. Then fleets of junks loaded with cotton goods, kerosene, tools, matches, silk, and tobacco come upstream and, after discharging their loads at the different river ports, turn southward, laden with the products of Manchurian farms.

Here comes a sleigh which looks like a raft on runners. It is filled with straw covered with a heavy ox-skin rug, on which the driver is sitting so wrapped in furs that all we

can see of him is his eyes. See that line of heavy carts drawn by eight shaggy little horses pulling with might and main, and filled to the brim with beans which have come many miles across the frozen country. The carts are so rough and loosely made that we wonder why the beans do not shake out through the cracks in the sides and floor, until we see that they are lined with coarse mats made of millet straw.

It would be as hard for the Manchurian to do without millet as for the Japanese to get along without bamboo. It is the staple food both of the animals and of the people. The straw is used for fuel, for fences, for coarse mats, and, plastered with mud, for the walls of houses. The heads of millet are tied together and used for brooms. In the spring the roots are plowed up and used for fuel. In our trip through the country we notice in every yard the stack of millet roots, just as in our own land we find the coal in the cellar or the woodpile in the shed.

Do you hear that crack of a whip like a pistol shot? What a grunting and squealing follows! It is only a boy just in from the country with a drove of hogs. The squealing creatures fill the street, so that we are forced to step into a doorway to give them room. Those teams waiting before that great building are filled with frozen pigs. Pork, you remember, is the favorite dish of the Chinese, and without it a feast is no more complete than our Thanksgiving dinner would be without the turkey. Many hogs are killed during the winter on the farms scattered through the country; these are brought in carts to the cities for distribution, and many more are driven in from the country in droves and slaughtered in the cities.

Let us stop on our way north from Mukden for a glimpse into a Manchurian home and see how these farmers and drovers and carters live. The low stone or



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FIG. 51. LET US STOP FOR A PEEP INTO A MANCHURIAN HOME

mud buildings do not look attractive on the outside, and as we enter, the inside appears less so. If we were to stay all night, we should have to sleep on that low brick platform. The only covering is a dirty felt quilt, which is already so thickly inhabited that we should get very little

rest. Even in the coldest weather we should probably be warm enough, at least during the early part of the night, as there are little flues under the bed which are heated from the fire of millet straw. The bed is very warm when the fire is burning, but cools off quickly as it dies down.



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FIG. 52. CHOPSTICKS ARE USED IN  
MANCHURIA

Unless we know how to eat with chopsticks, we shall not accept their invitation to dinner, as chopsticks are used by the Chinese in Manchuria just as they are by their relatives farther south. You may not care for the food which is offered. It is millet flour boiled in water until it forms a kind of mush, and then mixed with some vegetable or bit of

chopped meat. Tea is always served, but even if you like tea as we drink it in our country, you will not like the brick tea which is used in Manchuria.

There are few men at home in the winter. Some are away in the deep woods hunting and trapping, some are lumbering, and some are gone with the carts of beans to the nearest river port. The women tend the animals, get the food, make the straw mats, and reel the silk from the cocoons. You are surprised, are you not, to find silkworms

in a country so far north as Manchuria? They are raised here in immense numbers, and silk is the most valuable of all the animal products. The worms feed on the leaves of the oak tree, and the threads which they spin are very strong but not so round and smooth as those spun by the mulberry-fed worms. This unevenness accounts for the roughness of the pongee which is made from this so-called wild silk.

Harbin, nearly six hundred miles north of Dairen, consists of three distinct parts: the old Chinese city remains just as it was before the invasion of the Russians, the commercial port is on the bank of the Sungari River, while between the two, at the junction of the main line of the Trans-Siberian Railroad and the branch running southward to Dairen, lies the newer Russian section. The city has direct railroad connection with Dairen and Newchwang, the southern outlets of Manchuria, with Vladivostok, the eastern terminus of the Trans-Siberian Railroad, and, by means of this railroad, with the great centers of Europe. Although they are frozen nearly half the year, the Amur River and the Sungari, on which Harbin is situated, furnish during the remaining months cheap water transportation for quantities of lumber, grain, clothing, boots and shoes, furs, and ore. Mountains rise to the east and west of the city, and the valley between is covered for miles with endless fields of wheat and millet. A field of giant millet is a wonderful sight; it stands, a sea of waving green, from twelve to fifteen feet high. In September, when nearly ripe, the heads turn to a purplish-brown color and droop slightly as if weary of carrying longer the fine large golden kernels which form the chief food of the people.

The plains of Manchuria make ideal wheat fields, and the flour-mills of Harbin are equipped with modern machinery. In the future, flour will be one of the most important products of Manchuria, and Harbin will be the center of the output, as Minneapolis is in the United States.

Down by the river, beside the flour-mills, we pass many saw-mills, where the whizzing saws are continually screaming for more lumber. In warm weather the river is crowded with junks loaded with grain, timber, and firewood, and many coolies are busy on the wharves. We see lines of carts, just as numerous and just as roughly made as those at Newchwang, filled with beans, wheat, hogs, and skins. That is a queer-looking team standing near the carts at the railroad station. It is a little wooden house with a stove and chimney, set on wheels (in winter on runners) and drawn by four wiry Mongolian horses. That is the stage-coach which runs between Harbin and a neighboring town. It would be fun to ride out into the country in such a curious conveyance, but many other lands are still waiting to be explored, so we will fasten our fur coats more closely about us and go for our next visit into Siberia, the coldest and the largest country of Asia.



TOPICS FOR STUDY

I

1. Position of Manchuria.
2. Growth of the Russian Empire.
3. Russia in Manchuria and Korea.
4. The Chino-Japanese War.
5. The Russo-Japanese War.
6. Resources and productions of Manchuria.
7. Cities of Manchuria.
8. Traffic and transportation.
9. Life in Manchuria.

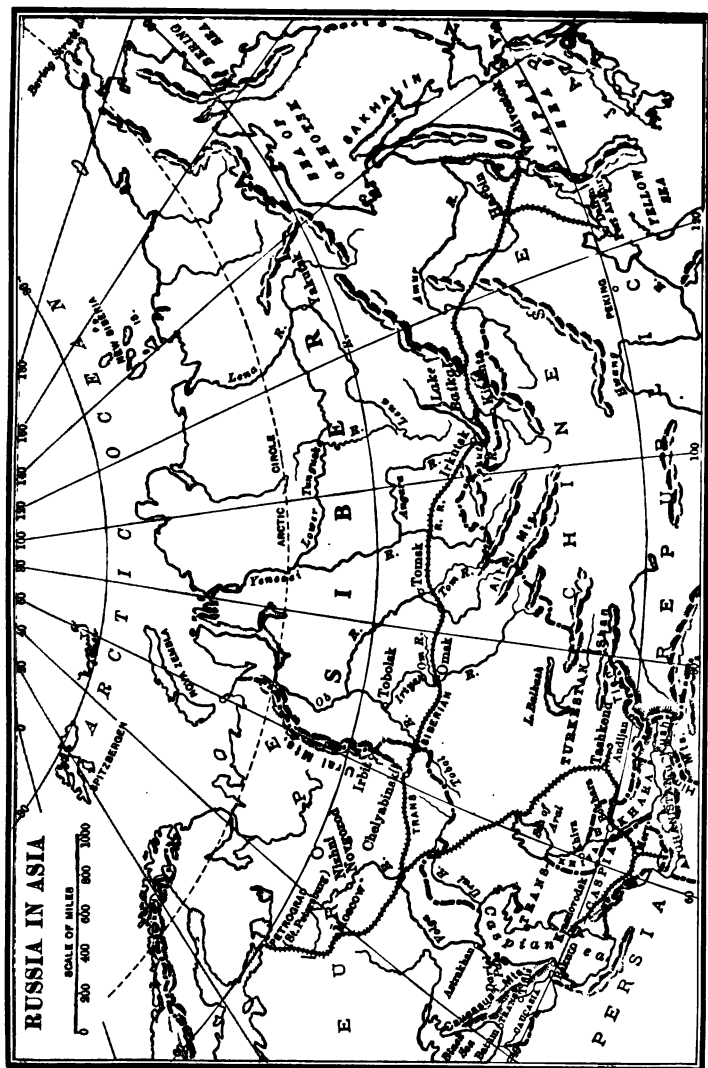
II

1. Make a list of all the cities spoken of in this chapter. Opposite the name of each one write the name of a European and of an American city in about the same latitude.
2. Compare the size of each city spoken of with some city in the United States or with your home city.
3. On an outline map of Asia show Manchuria and Korea. Indicate the railroads spoken of and the cities at the termini.
4. Write in a brief statement your opinion of Russia; of China; of Japan.
5. Ship a cargo of Manchurian beans to England. Name the shipping and receiving ports and the waters sailed on. Use the scale and give a rough estimate of the distance between the two places.
6. Compare the length of the voyage in question 5 with its length if made by way of the Panama Canal.
7. Fill in these elliptical sentences:
  - a. Manchuria touches \_\_\_\_\_ and \_\_\_\_\_; its shores touch the \_\_\_\_\_ Sea.
  - b. Some important cities of Manchuria are \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.
  - c. Some important products of Manchuria are \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.
  - d. A branch of the Trans-Siberian Railroad runs from \_\_\_\_\_ to \_\_\_\_\_.

## III

Be able to spell and pronounce the following names. Locate each place and tell what was said of it in this and in any previous chapter.

Manchuria	Persian Gulf
Mongolia	Yalu River
Korea	Sungari River
Siberia	Amur River
China	Liao River
Japan	Port Arthur
Persia	Newchwang
India	Mukden
Russia	Harbin
England	Dairen
Germany	Vladivostok
France	Peking
Formosa	Copenhagen
Liaotung peninsula	Constantinople
Gibraltar	Riga
Minnesota	Petrograd
California	Minneapolis
Baltic Sea	Philadelphia
Black Sea	Portsmouth
Caspian Sea	





## CHAPTER VIII

### A TRIP ON THE TRANS-SIBERIAN RAILROAD

Let us take a trip on the longest railway in the world. It stretches eastward from Moscow over the Ural Mountains and thence entirely across the largest country of Asia to the Pacific Ocean. This ribbon of steel would reach from San Francisco across the United States and nearly to Liverpool. That part of it east of the Ural Mountains, known as the Trans-Siberian Railroad, if laid on the map of North America, would reach from the Gulf of Mexico to within a short distance of the North Pole.

What an immense country Siberia must be to contain such a railroad! If on a map of Siberia you placed a map of the United States, so wide a margin would be left around it that you would have nearly room enough for all the countries of Europe except Russia. Surely a country so large and so far distant must be an interesting one to visit.

Starting from the beautiful stone station in Moscow, the first part of our trip will take us across the Russian plains and over the Ural Mountains. These are scarcely more than high hills, and the very highest is lower than Mt. Washington. Most of Russia is a vast plain which, though very useful for agriculture, is almost entirely lacking in mineral wealth. This the Ural Mountains possess in great quantities. A large part of the world's supply of platinum comes from the Urals, and they furnish also much

of the iron used in Russia. Gold and precious stones are found in abundance. There are sapphires, emeralds, topazes, amethysts, garnets, and many others, to say nothing of rich stores of gleaming porphyry, beautiful jasper, and great slabs of malachite in every shade and tint of green.

On the summit of the pass over the Urals we see by the side of the railroad a stone monument with the word *Europe* on its western face and *Asia* on its eastern side. This



FIG. 53. OUR FIRST STOP IN ASIA IS AT CHELYABINSK

small column in the heart of the mountains is the boundary stone between the two continents, and as we pass it we know that our Siberian trip has really begun. Our first stop in Asia is at Chelyabinsk. This town with the long Russian name is the gate through which the railroad enters Siberia. For a hundred years millions of Russians have passed this way on their long eastern journey, and to-day thousands stop here before going farther into the new land.

Can you imagine a prison larger than the whole United States? That is what Siberia used to be. Thieves and

murderers, people whom the Russian government feared might incite the people to rebellion, drunkards and vagabonds whom village councils were unwilling should remain longer in the community, were sentenced to Siberia, some for life and some for a certain number of years. At the end of their sentences some of the exiles returned to their homes in Russia, while others, seeing how fertile the land was and how prosperous its people were likely to become, settled in Siberia. The families of the convicts often went with them into exile, and many of the present inhabitants of the country are their descendants.

These prisoners and their families were taken to Chelyabinsk and from there distributed under guard to different parts of the country. Russia to-day realizes the value of the immense territory of Siberia and is anxious to people it with more desirable citizens than the descendants of criminals, so she is encouraging emigration instead. Some of her worst offenders are to-day sent to the island of Sakhalin on the far eastern coast of Asia. This island is rather smaller than the state of Maine, and so few people live in it that the average is less than one to a square mile. It is a cold, bleak, foggy land with many mountains and dense forests. The native tribes live by hunting and fishing and by bartering furs. Snow falls in October and remains on the ground till May or June. Early in the winter the water separating the island from the mainland is frozen over, and there is no communication with the outside world except by a long, dangerous sledge trip. Once or twice during the winter the mail is brought by sledge, and a crowd, eager for home letters, await their arrival at the little post office, which emphasizes its distance from the homeland by a

signpost which tells us that Petrograd is 10,186 versts away. A verst is about two thirds of a mile, and 10,186 versts equals nearly seven thousand miles.

The crowds which one sees to-day at Chelyabinsk are for the most part emigrants going to begin a new life in



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FIG. 54. ONCE OR TWICE DURING THE WINTER THE MAIL IS BROUGHT BY SLEDGE TO SAKHALIN

Siberia. Every year hundreds of thousands of Russian peasants are settling in Siberia, and the government is doing everything possible to encourage emigration and make it successful. The peasants are sent to the most fertile parts of the country, they are given large areas of land on which they pay no taxes for some years, and they are furnished, at very low prices and with long terms of credit, with seeds



and tools, cattle and horses. The spring is the most favorable time for emigration, and during that season we should see in the large, bare-looking buildings near the station of Chelyabinsk hundreds of men, women, and children huddled together with their piles of bedding, cooking utensils, trunks, and boxes. Here they are examined, their land



FIG. 55. THE CROWDS THAT ONE SEES TO-DAY AT CHELYABINSK ARE EMIGRANTS

is allotted to them, and they are started on their eastern trip, which in some cases takes months to complete. Some go by railroad, some by water, and some overland by the great post road which stretches entirely across Siberia. Those who go by this slow method to the Amur valley in the eastern part of the country may be two or three years on their journey. They stop to rest their horses, to feed their

cattle, to earn money by working on the railroad or on some farm, or perhaps to camp in some place long enough to raise a crop of wheat or barley in order that they may be sure of food during the winter.

Leaving Chelyabinsk and the mountains behind us, we ride on through a flat, treeless country. Hour after hour



FIG. 56. THE RAILROAD STRETCHES IN A STRAIGHT LINE LIKE A RIBBON OF STEEL UNROLLED OVER THE LAND

and day after day we see only the level, grassy fields rolling away on every side to meet the sky. As far ahead and behind us as we can see, the railroad stretches in a perfectly straight line over the land.

At the end of every verst we pass a little yellow house close beside the track. As we glide slowly by, a man, or sometimes a woman or a child, comes out and waves a green flag to signal that all is well for the train to continue on

its way. Every two thirds of a mile from Moscow on the Volga to Vladivostok on the Pacific a verstman will be found living in his lonely home to guard this single line of steel, which furnishes the only railroad communication between Europe and eastern Asia. There are nearly ten thousand of these verstmen, many of whom are ex-convicts.



**FIG. 57. AT THE STATIONS THERE ARE PLENTY OF THINGS TO EAT  
AND TIME TO EAT THEM**

They usually till a little farm and keep a few cattle and sheep, but their lives at best must be lonely, with no neighbors nearer than the guards at the next verst house nearly a mile away.

Every twenty or thirty miles the train stops at a neat little station with a water tower and a huge woodpile near by. When the train comes to a standstill, everybody rushes

pell-mell for the platform. Getting out of the cars is not so simple a matter as it is in the United States, as people in Siberia carry much more baggage than is usual or necessary in our country. Hotel keepers in Asia will look at us in surprise if we ask for a pillow or sheets and blankets for our beds, as we are supposed to bring our own. Then too the Russian likes to drink tea at all times of the day, and for this reason people carry with them their teapots, sugar, and usually some food. At every station there is a steaming hot samovar, where each one can help himself to hot water. There are also plenty of things to eat and time to eat them. The platforms are crowded with people from the surrounding country, selling milk, eggs, and huge loaves of white and black bread, while inside the station there is a restaurant and a lunch counter. Many of the poorer emigrants get what they need at the station, make their tea and soup on the train, and eat and drink while they travel.

It seems good to walk about a little after riding so long. Nearly everybody alights whenever the train halts at a station, for it is sure to make a stop of from fifteen minutes to half an hour. No one is ever in a hurry in Russia. "What is the use?" a Russian would say to you; "there is plenty of time. If we cannot do everything we wish to-day, to-morrow never fails to come."

There is no danger of our being left behind, for the bell gives us plenty of warning. It rings once as if to say, "You must think of starting." After two or three minutes its ring again tells us, "You are going to start." A third time it sounds, and at this signal everybody gets aboard, and after the whistle blows an additional warning we are on our way again.

But, you ask, where are the towns and cities? We have seen none as yet around the stations. That is one of the peculiar things about the Trans-Siberian Railroad. The towns lie from two or three to ten or fifteen miles from the station which bears the same name, and a ride behind a galloping Russian horse over a road worn into deep ruts and gullied by the rains is something long to be remembered.



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**FIG. 58. A STRAGGLING ROW OF LOG HOUSES STRETCHES ALONG EITHER SIDE OF A VERY WIDE SPACE WHICH SERVES FOR A STREET**

We dash up in fine style to the group of buildings which make up the village, and a feeble old man comes out to open the gate for us. Many Siberian towns are surrounded by a rough wooden fence to keep the cattle from straying, and some old person, an ex-convict very likely, lives in a little wooden shanty near the gate, to open and close it for any one who may wish to pass through.

Villages in Siberia look as desolate and uncared-for as those west of the Ural Mountains in Russia. A straggling row of log houses stretches along on either side of a very

wide space which serves for a street. The houses are made of logs stuffed with moss, unpainted except for the door and window frames, and unornamented save for a few scraggly-looking plants in some of the windows. In the largest of the buildings there are only two or three rooms, and in many of them only one. See the muddy yards in front of the houses! The buildings themselves are not much cleaner, for look! there is a pig coming out of one of them. That yellow house, larger than the rest, with a black-and-white post in front of it, is the posthouse, where travelers can get food and fresh horses to continue their journey.

As we step inside one of the houses it almost seems as if we were a thousand miles or more farther west in European Russia. There is the same huge stove, whose great oven serves for heating, for cooking, and for taking steam baths. The sacred picture, or icon, hangs in the right-hand corner of the room; the bench extends around three sides of it, and the rude table and stools occupy the center of the floor. There are better houses than this one, but in hundreds of villages all over the Russian Empire the majority of the people live in homes like the one described. In no country of the world are the houses and villages so similar; having seen one, we have seen them all.

These little communities are governed, as are the villages in Russia, by a village council chosen by the citizens. A peasant does not own the land which he tills; he cannot sell it, neither can he buy more. It belongs to the village in which he lives, and the council apportions to each family a certain part of the pasture, woodland, and farm land. Russian peasants are a social people and would never be

contented to live apart in lonely farmhouses such as are common here. So they gather in the villages and sometimes go several miles to their daily work. During the summer, when the men, and often the women and children, are away in the fields, the villages seem quite deserted.



FIG. 59. THERE ARE FINER HOUSES THAN THIS IN SIBERIA, BUT THE MAJORITY OF THE PEOPLE LIVE IN HOMES THAT ARE NO BETTER

The abundance of fertile land in Siberia has led to wasteful methods of farming. A peasant generally does not bother with scientific methods, with fertilizers, or with rotation of crops. When one piece of land shows signs of exhaustion, he leaves it and plants another. There is plenty of land; why should he spend time and money on one piece when another will do equally well? As Siberia becomes

more thickly settled, these wasteful methods must give way to more economical ones, but at present there is land enough and to spare.

The wide street which extends the length of the village is ankle deep with dust during the summer, and in the spring and fall a field of mud. We wonder when the Siberian farmer ever travels or carries his farm products to market. Cold as it is in winter, the peasants like that season the best, for the only really good roads in Siberia are the hard-beaten snow tracks. Can you imagine a sledge-ride through the country when the snow lies deep and white for miles around? You snuggle down among the warm fur robes, the horses dash along at full speed, the bells tinkle merrily, and the dry, cold air acts like a tonic. You can ride for miles through the open country and see no trees, no houses, nothing but the broad stretch of level snow as far as the eye can reach. You may meet a few teams on the way—a farmer carrying his milk to the dairy or his butter to the nearest railway station, or a fur-clad driver with his sled piled high with frozen fish for the village store, with grain to be sent away by rail, with logs from the nearest forest, or with goatskins and sheepskins which later may find their way into some great shoe manufactory in the United States. Siberia has a long, very cold winter and a short, very hot summer. It is the coldest country in the world and, what seems queer, it is also one of the hottest. In the winter the mercury falls many degrees below zero, and in the summer it rises to more than a hundred degrees above. The coldest place in the world is in northeastern Siberia, where the thermometer has been known to register more than ninety degrees below zero





**FIG. 60. MAMMOTHS WERE HUGE CREATURES WITH LONG IVORY TUSKS AND HEAVY, COARSE HAIR**  
Courtesy of Mr. F. A. Lucas, Director of the American Museum of Natural History, New York City

in winter and as far above in summer. The spring and summer are very short, and early in the autumn the winter storms begin. The rivers of Siberia are frozen during the cold season, some of them to their very beds. The land in the northern part of the country is frozen hundreds of feet deep, and in summer it thaws only a few inches below the surface. You notice that many of the large rivers flow to the north. The ice breaks up first in the southern parts of their courses, but because they are still frozen near their mouths, the water cannot escape through their channels, and instead overflows the land. As the water cannot sink into the frozen ground, great floods occur, and immense marshes, called tundras, are formed which cover much of northern Siberia. Buried in the tundras there have been found in great numbers the remains of animals unlike any which live on the earth to-day. These animals are called mammoths. The ice in which they are embedded has preserved their bodies perfectly, so that we know that these mammoths were huge creatures, larger than elephants, with long ivory tusks and heavy, coarse hair and with an inner coat of thick, matted wool. During the spring floods the rivers wash and gully out large areas of land, thus freeing the embedded skeletons, and hundreds of the natives find employment in gathering the tusks and selling them to European merchants.

On the second day after crossing the Ural Mountains we begin to see horsemen on the plains, some of whom try the speed of their shaggy little steeds by racing with the train. Farther out on the plain is a rider watching some cattle as they feed. So still he sits and so motionless is the horse that they seem like a statue carved out of stone.

These horsemen are Kirghiz, wandering people of the plains. They have large flocks and herds, which in the summer they drive from place to place for pasturage. Here are some of them getting onto our train as it stops at a lonely station. How queer they look in their long sheepskin coats, which, though the train is very hot, they do not remove. Perhaps they think that what will keep out cold will keep out heat also. They wear high red boots and small caps edged with fur, and their faces are tanned and wrinkled from their out-of-door life. Out on the plains we see from time to time their herds of cattle and flocks of sheep and goats, and catch glimpses of some of their encampments made up of round, dark tents. We wonder of what these people are thinking as they see the long trains glide along, loaded with emigrants. Do they realize that, as more and more settlers come to occupy the land, they will have to cease their wanderings, fence their fields, build towns and cities, and give up their old free life and limitless pastures?

Every day since leaving Moscow we have met trains westward bound. Some were carrying government officials, soldiers, merchants, tourists, and dissatisfied emigrants; others were loaded with hides and skins, wheat, rye, or barley. Grain is the chief product of Siberia, and the time may not be far distant when she will rival the United States and Canada in her production. We have also met trains made up of from thirty-five to fifty cars, all painted white, which have excited our curiosity. What are they carrying? What can the farmers of Siberia furnish the people of Europe in such great quantities that these long trains and so many of them are required? You will be

astonished when I tell you that they carry nothing but butter. Western Siberia contains some of the finest pasture land in the world, and in that part of the country dairying is more important than any other industry. Hundreds of tons of excellent butter are exported to Europe every week. This is carried in refrigerator cars to the Baltic sea-ports Petrograd, Riga, and Revel, and from these cities it



FIG. 61. PEOPLE RIDE VERY COMFORTABLY IN SIBERIA IN THE LOW, BASKETLIKE WAGON CALLED A TARANTAS

is shipped in refrigerator boats to London. Danish butter has for many years been considered better than that made in any other country, but to-day it is said that much of the Siberian butter is just as good. There are in the country several thousand butter factories, and the Russian government is doing everything possible to encourage the industry. It has established hundreds of dairying schools, where people are taught the best way to feed their stock, to care for their milk, and to make and pack butter. In three months an intelligent peasant can learn enough to

run a dairy for a few farmers or perhaps for the entire village where he lives. Thus new dairies are constantly being started, and the industry is rapidly spreading. The farmers are sure of a steady sale for their milk, or for their butter if they make it at home. Every farmer owns horses and thinks nothing of carrying his butter, or that manufactured in the village dairy, many miles to some city or town. From this center, caravans of sledges, loaded with the butter which has been brought in from the surrounding country, travel to the nearest railway station, perhaps several hundred miles away. The trip is such a long one that the men have to rest on the way, and one driver takes charge of four or five sledges while the others curl up in their furs for a good sleep. They in their turn will care for several horses so that other drivers may rest.

From the fenced fields, the trees, and the scattered villages which begin to appear on the plain we realize that we are approaching a city. Soon we catch sight of spires and domes, of glistening white churches with green roofs, and across a wide, swift river we can see rows of dark, unpainted houses lining broad streets. The train rumbles over a splendid bridge and finally comes to a stop at the well-built, electric-lighted station at Omsk.

We shall find in the course of our journey that many of the names of Siberian cities end in *sk*. In the Russian language this ending means that the city is on a river of the same name. Tobolsk is on the Tobol River, Irkutsk on the Irkut, and Omsk is located just where the Om River enters the Irtysh, a branch of the great Ob.

As we notice the situation of Omsk we begin to understand the reason for its importance. It is located just

where the Trans-Siberian Railroad, the great highway which opens up the country from east to west, crosses the river highways leading north and south. So numerous are the waterways connecting with the railroad and with the Ob River that goods can be brought to Omsk from the Ural Mountains on the west, from the Arctic regions on the north, from the Lena valley on the east, and from China on the south. Besides these transportation routes, which make the situation of the city so favorable, Omsk is located in the center of two thousand square miles of fine farming and pasture land; rich coal deposits have been discovered not far off to the south, and gold and copper are mined in the vicinity.

Siberian cities have a new, unfinished look. In Omsk there are fine business blocks and splendid churches side by side with unpainted log houses bordering dirty, unpaved streets. The store windows interest us. Here is one showing different kinds of farming machinery, and nearly every piece bears the name of a United States firm. We send many mowing machines, harvesters, reapers, and small farming tools to Siberia. Some are sold to the Russian government, which establishes stores in different cities and sells to the emigrants at low prices and with long terms of credit. Some are sold to butter merchants, who in turn sell them to the farmers and take their pay in butter. Sometimes the more expensive machinery is sold to a town or to a group of farmers or perhaps to a wealthy Russian who rents it to his poorer neighbors.

We can learn a great deal about the country and the people by watching the scenes in the streets. See that sunburned Kirghiz on horseback, bound for his village of

black tents out on the open plain. Here come some butter sledges bringing in the product from the scattered villages. Close behind them are several loads of wheat, which was harvested months ago, but which, on account of the poor roads, was not carried to market. There goes the sledge of



FIG. 62. THERE IS THE SLEDGE OF A WEALTHY MERCHANT

some wealthy merchant. He is so wrapped in furs that we can hardly get a glimpse of his face, but his splendid horses go dashing along as if they loved the keen, frosty air and the music of the bells.

See those tall camels walking silently on their great padded feet and almost hiding the low sledges to which they are harnessed. The sledges are filled with tea, which

has come overland from far-away China. All of the tea sent from China to Russia formerly went by this long, slow route; to-day much of it goes by the ocean route to Odessa, and more by the Trans-Siberian Railroad, though large quantities are still carried overland by coolies and camels.

Add one letter to *Omsk* and you have the name of the city where we shall make our next stop. Tomsk is more than fifty miles from the main line of the railroad, and passengers going there have to change to a branch line. On arriving at the pretty white railroad station nestled in the grove of birch trees we find that the city itself, like other Siberian cities and towns, is still several miles away and must be reached by a long drive through a field of mud.

As we approach Tomsk it looks like a wonderfully fine place. On a steep, rugged cliff by the river the residences of the officials and rich merchants appear in the distance like beautiful mansions. A nearer view, however, shows us that the buildings which we thought were stone and marble are only whitewashed brick, the gardens are dusty and unattractive, and the streets dirty and uncared-for. In the lower town are the offices, warehouses, workshops, and stores, a curious jumble of brick and stone buildings, some modern blocks with electric lights, and some little one-story wooden structures. The stores have no attractive windows, but inside they offer a variety of wares. What will you have, some tea from China, some apples from the Caucasus Mountains, a kodak and some new films from Germany, or a mowing machine from the United States? Perhaps you would like some nuts from the Siberian cedar tree, which everyone seems to be eating. Thousands of tons of these nuts are gathered every year and sold in all parts



of Siberia; little heaps of shells strew the floors of the cars, the stations, and the stores.

Tomsk contains some beautiful churches, a fine library, and other public buildings, but we are most interested in its splendid university. The city is the educational center of Siberia and ranks next to Moscow and Petrograd in its schools. There are more than two thousand students in the university, and many more have flocked to the technical schools and other institutions. On the whole, you see, Tomsk is more noted as an educational center than as a commercial city. Its trade is hampered by the fact that the city is situated on a branch rather than on the main line of the railroad, and on the Tom River, a small stream, instead of on the mighty Ob itself. Still it is an important shipping place for butter and for furs and skins. Perhaps some of the sheepskins and goatskins from Tomsk are made up into the very shoes that you have on your feet.

As day after day passes in our eastward journey we notice how the railroad crosses one after another the great rivers of the country. The railroad stretching east and west and the waterways crossing north and south open up the various parts of Siberia and aid in the transportation of goods. No country in the world is better provided with large rivers than Siberia. The total length of its navigable waterways is greater than the circumference of the earth at the equator, but unfortunately navigation is hindered during much of the year by ice. Even when frozen the rivers are far from useless, as the smooth, clear ice makes splendid highways, on which there is a great amount of sledge traffic. By means of the rivers immense quantities of products are brought by boat in summer and by sledge

in winter from both the northern and the southern parts of Siberia to stations on the railroad. The rivers not only open routes to the north and to the south, but one can go by boat on the main streams, the smaller branches, and a few canals entirely across Siberia from the foot of the Urals on the west to Yakutsk or to the mouth of the Amur on the east. It is a zigzag route and of course a slow one, and only possible when the rivers are open. Many of the emigrants to the Amur region have followed this route, and we wish that we might journey with them across the country or at least take a river trip down the Ob or Yenesei or Lena. These three rivers and the eastward-flowing Amur are among the longest rivers in the world. Some of their branches, whose names are not printed in the ordinary school geography, are hundreds of miles long and are of immense importance to the people living in their valleys.

A trip on some of these great rivers would give us an excellent idea of the three belts into which the country is divided. To the south is the rich farming region; north of this is the broad, deep forest belt, where the rivers flow for miles beneath stately birches, graceful larches, whispering pines, and fragrant cedars; on the northern edge the forests gradually dwindle to stunted trees and shrubs, and the rivers finally emerge on the bare, desolate arctic plain and lose themselves in the northern ocean.

Thus far during most of our journey we have been riding over grassy plains, with few trees in sight save on the banks of the rivers and in the towns. Now, however, near Tomsk, we approach the great Siberian forest, deep and dark, with flickering shadows and moss-covered ground. This is one of the greatest forest belts in the world. It

stretches for four or five thousand miles from east to west and from one to two thousand miles from north to south. In it we might wander for days and see no person, no house, no sign of life. There are miles of treacherous swamps and immense areas where man has never penetrated. In other places near some stream we might meet a fisherman from some of the northern tribes who, by means of hunting, fishing, and keeping herds of reindeer, just manage to get a living. In the winter we might meet a trader with his load of furs—wolf, bear, silvery fox, costly sable, and fine, soft squirrel; or some official, visiting one of the towns in the district of which he has charge, might pass us in his low sledge. How comfortable he looks, so covered with warm fur robes that we see but little of his face! Perhaps in an opening in the woods we might find a little village. The log huts are clustered closer together than in the villages on the open plain, for the sighing pines and the ghostly birches make the place even more lonely than the grassy stretches. These dark forests have a strange effect on the emigrant who has lived all his life in the sunny fields of Russia. In the deep shadows of the Siberian woods he laughs less often, becomes silent and gloomy, and doubtless longs in his heart for the sunshine of his old Russian home.

The fields which these forest villagers cultivate are often far away in other openings among the trees, and few occupations are carried on in the village itself. We shall be sure to find in each one, however, a posthouse where we can get food and fresh horses to continue our journey. The snapping of a driver's whip or the tinkle of sledge bells in the winter season always brings to the doors and windows barking dogs, scampering children, and curious elders.

These deep Siberian woods shelter many fur-bearing animals, such as the otter, ermine, beaver, sable, marten, fox, mink, and the larger wolf and bear. The cold climate makes a thick, warm coat necessary, and the fur is therefore more valuable than that of animals living farther south. Many of the natives spend their time during the winter in hunting and trapping, and great quantities of furs, among them some of the most costly varieties, come from the Siberian forests. The life of a Russian trapper is a hard one. During the winter he spends much of his time alone in the deep woods, tramping on snowshoes for hours every day to visit his traps and nets. In the spring, when the days grow longer and the snow softer, he makes his way to the trading post many miles from his camp, where the pile of furs which represents his winter's work, and for some of which my lady may later pay a small fortune, are sold for a sum hardly sufficient to support him for the rest of the year.

From the trading posts the pelts are sent to the nearest river port or railway station, and thence to Kiakhta, Irbit, Yakutsk, or Nizhni Novgorod, to be sold at the great fairs which are held annually in these places. From these distant cities most of the skins are sent later to London, the greatest fur-distributing center in the world. Here buyers from all over the civilized world congregate at the great auction sales, at which a nod of the head of some famous fur dealer may mean a sale of several thousand dollars.

Some of the skins are dressed in London, but many more are sent to Leipzig, Germany, which ranks first as a fur-dressing city. Here they are changed from dirty, greasy skins into fine, soft furs. Some of the great

fur-dressing houses guard very carefully their methods of cleansing and dyeing. It requires much skill to get the oil from an ermine skin without giving a yellow tinge to



**FIG. 63. IT REQUIRES MUCH SKILL TO GET THE OIL FROM AN ERMINE SKIN WITHOUT GIVING A YELLOW TINGE TO THE PURE WHITE HAIR**

the pure white hair, or to polish a sable skin so that all parts shall have an equal luster. You would like to watch the process which the manufacturer calls tubbing the pelts. Huge tubs stand in a row on one side of a long room, and

in each one is placed a number of skins sprinkled with hot mahogany sawdust. In each tub a half-naked workman treads and twists and works the skins with his feet for several hours until they are thoroughly softened.

After the furs are dressed, they are graded, sorted, and finally sent to the cutter, who cuts them into small strips, which he matches so perfectly and pieces together so carefully that later you will think, as many people do, that your collar or muff is one whole skin.

Siberia is the greatest fur-producing country in the world, and its output of skins is enormous. Millions of squirrel skins and other more common varieties and thousands of the rarer and more expensive kinds are sold every year at the great Russian fairs. Large quantities of furs are bought by people in the United States, and some of our largest firms send their agents to the eastern Siberian fur district to buy direct from the trappers instead of waiting for the fairs and paying the higher prices which are demanded there. Many of the skins thus purchased are brought to New York, where they are dressed and manufactured.

Besides the furs, think of the future wealth which lies hidden in this immense forest belt of Siberia. When the country becomes more thickly settled, as it surely will, when mills and factories and great business blocks spring up in dozens of towns and cities, as they are certain to do, there is plenty of splendid building material in the Siberian woods to feed all the saw-mills which may be built. At present forest fires are sweeping over large areas of valuable woodland every year; tall Siberian cedars are sacrificed merely to obtain the nuts, which are eaten everywhere in the country; lumbering is carried on with a great waste;

trees are felled to clear the land for planting and are left to decay. This is just what usually happens in the early history of a country where large areas are covered by forests, but with the growth of settlements, the building of towns and cities, and the development of manufacturing more careful methods begin to prevail.

Ever since leaving the station where the railroad branches off to Tomsk we have been riding through the great forest belt. Gradually we leave the wooded region to the north and swing southward toward Irkutsk, the next city at which we shall stop. Our route for a large part of the way across Siberia follows the old post road which, before the days of the railroad, was the main highway across the country. Every twenty or thirty miles along its entire length the Russian government has established posthouses, where travelers can get food and lodging (such as it is) and fresh horses to continue their journey. As each relay of horses travels only to the next posthouse, they can make such good time that it is possible to cover long distances at a fairly fast rate of speed. One can sleep in the sledge, or tarantas, more comfortably perhaps than at the posthouse, where big fires and tightly fastened windows make the rooms hot and close, and where the beds are already fully occupied by small but annoying travelers.

Over this post road, before the building of the railroad, the mails were carried to eastern Siberia; over it have trudged thousands of weary exiles, each step taking them farther and farther from home and loved ones; over it groups of emigrants, with their flocks and herds and their wagons filled with all their household possessions, have

moved toward new homes and new lives of prosperity in the empty land; over it soft-footed, tireless camels have trudged with their heavy burdens to supply the people of the western world with their refreshing cup of tea.

As railroad traffic develops and branches are built from the main line to the north and south, the old post road will lose, as it already has to some extent, much of its importance. Nearly all of the long-distance trade will doubtless be carried by train, but local traffic will still make use of the post road. Perhaps no other highway in the world can tell such stories of cold and suffering, of drifted snow and hungry wolves, of weary travelers and lost hopes, of prisoners and exiles, as are familiar history in the old Trans-Siberian post road.

Irkutsk, one of the most important cities of Siberia, is a three days' ride from Tomsk across fertile valleys and open plains and through groves of birch trees and deep forests of evergreens. On the way we see long caravans outlined against the blue sky and catch glimpses of little log villages in the distance. The station platforms are crowded with shepherds, farmers, miners, and hunters, to whom the passing of the Trans-Siberian express is the one excitement of the day. Irkutsk is the transfer station for all through traffic between Europe and eastern Siberia. Here we must leave the express, to take a slower train for the rest of our journey. The big waiting room is crowded with people and piled with baggage, from which peep out the ends of pillows, the ever-present teapot, and other familiar household articles. All around are white-aproned porters, Cossack guards, excited travelers, men bundled in warm sheepskin coats, and weary women wrapped in heavy shawls.

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If we could choose the time for our visit to Irkutsk, it would be in the winter, for the drive to the city, several miles away from the station, would be much pleasanter over the hard snow than through fields of mud or in clouds of dust. "How beautiful!" you exclaim as you catch your first sight of the city. And so it is, from a distance. The broad Angara, into which the Irkut River flows, sweeps by near at hand, the numerous churches gleam in white and gold and blue, and imposing stone and substantial brick buildings line the streets. A nearer view discloses the fact that Irkutsk, like other Siberian cities, is a curious mixture of old and new and good and bad. Beside a splendid modern stone block is a row of log houses; before the handsome cathedral is a rickety board sidewalk; in our large electric-lighted room in the hotel we find no soap, no sheets, and no running water; we wade deep in mud when we cross the street to visit the handsome museum; we spend the evening in the splendid theater enjoying a really fine performance, and afterwards grope our way home through the wide, dark streets. Like western cities, Irkutsk has its millionaire citizens, though many of these are ex-convicts or the descendants of convicts, and the amount of crime is proportionally large. When we remember, however, that we are in the heart of Siberia, four thousand miles from any large European city, we wonder that the city is as safe as it is and can boast so many modern improvements as it does.

Irkutsk is destined to be a city of importance. Besides being the transfer station for all traffic between the east and the west, it is a center where several post roads meet. In the streets we meet caravans loaded with fiber from the cotton fields of Turkestan, dark-skinned Mongols from

China with loads of tea, trappers with piles of soft skins from the Lena basin, farmers with loads of wheat for the flour-mills in the city, drivers in warm sheepskins with their piles of frozen fish from distant waters, and men from the mines in the north with their bags of precious gold dust. Everywhere we see something which tells us what an important commercial center Irkutsk is.

At one end of the broad street that runs through the center of the city is a splendid statue of Czar Alexander the Third; at the other end is a large wooden arch which bears the inscription "This way to the great ocean." This sign had pointed the way eastward for travelers on the old post road for many years before the laying of the steel rails which bind together Europe and eastern Asia.

As we continue our eastward journey beyond Irkutsk the landscape changes. The plains rise into hills and these grow into forest-clad mountains until, when we reach Lake Baikal, forty miles east of Irkutsk, we are surrounded by lofty, snow-clad ranges.

Lake Baikal is nearly twice as large as Lake Ontario and is the largest fresh-water lake in Asia. The mountain scenery around is grand, its waters are of crystal clearness, and an abundance of fish live in its cold depths. At some future time, when Siberia is as thickly settled as the United States and has many large cities, manufacturing centers, and lines of railroads, this charming section may become, like many of our lake and mountain regions, a popular summer resort, for it certainly possesses all the natural features that would attract visitors.

The rugged, mountainous country around the southern end of Lake Baikal made that part of the railroad more

difficult to construct than any other portion. This section was not built for some time after the rest of the line was completed, and passengers were obliged to cross the lake by boat in summer and by sledge in winter to take the train on the eastern side. Can you imagine taking a forty-mile drive on the ice, with the thermometer twenty degrees or more below zero? The route is marked out by fir trees frozen into the ice, and several post stations break the long drive. We almost wish that we were obliged to go on the lake instead of in the close, stuffy car, but the scenery through which we pass is interesting enough to make up for the loss of the invigorating sledge ride. We catch glimpses of the curious villages of the Buriats, one of the many tribes of Siberia who have permanent homes in winter and who in summer move with their flocks and herds where the best pasture land is found. Their villages are all very similar, consisting of a cluster of rough wooden huts surrounded by stacks of hay and corrals for the horses and cattle. From time to time we pass some of their summer homes — round, dark felt tents looking for all the world like a coconut cut in halves. Now and then a Russian village with its straggling log huts comes into view, and farther on a Chinese settlement with its carefully tilled fields, showing a marked contrast to the careless farming methods of the Russian settlers.

We wind our way over forest-clad mountains, across narrow valleys, beside rushing streams, and through dark tunnels. We notice that we are gradually swinging southward, and on the morning when we cross the boundary into Manchuria everything is bustle and excitement. Dignified Chinese officials board the train to examine the

passports which we carry and to inspect our baggage. About three days after crossing the border of Manchuria we reach the city of Harbin, where, you remember, another railroad swings off southward to Port Arthur and Dairen, while the main line, on which we are to continue our journey, stretches on to Vladivostok and the Pacific Ocean.



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FIG. 64. THIS IS THE TERMINUS OF THE LONGEST RAILWAY  
IN THE WORLD

Vladivostok is the terminus of the longest railroad in the world. As we alight from the train our first impression is that we are in a European rather than in an Asiatic country, and it is hard to realize the truth of the statement on the sign which hangs above our heads, "Vladivostok from Petrograd, 9922 versts." The Russian flag is flying everywhere. Instead of the frail little houses of Japan, the narrow, filthy streets of China, or the mud huts of Korea

there are rows of brick and stone and stucco buildings, wide streets, and electric lights. One-horse conveyances, called droshkies, and some with three horses, called troikas, go flying through the streets in the usual breakneck Russian fashion. The outside horses in the troika dance and prance and gallop, while the middle one goes at a swift, steady trot.

We should know that we are near China by the numbers of Chinese wheelbarrows with their heavy loads. It would be easy to guess that Japan is not far distant, for there are many jinrikishas, with coolies instead of horses between the shafts. Dirty, white-robed Koreans, blue-bloused Chinese, and clean little Japanese are as numerous as the Russians, and many of the stores and business houses are in the hands of the yellow race.

From the hill on the west of the city where some of the finest residences are situated we can get a good view of the region. The long, straight city streets lead to the water front, the reddish-brown roads wind off to the north through smiling valleys and around green wooded hills, the cathedral gleams at our feet, and, more attractive than the sights on shore, the beautiful blue landlocked harbor, which has made possible this Queen of the East, as the Russians have proudly named their city, stretches off to the south. The fine docks and warehouses, the vessels riding at anchor, the powerful ice breakers, the grim warships, and the scores of smaller craft all tell of Russia's hopes and ambitions in regard to this distant city.

As the outlet of eastern Siberia, Vladivostok is bound to grow. It will keep pace with the future development of the country, and how great and how wonderful that will

be nobody ventures to predict. People to-day realize that Siberia is not a barren, desolate land fit only for exile prisons and ignorant native tribes. It is the Canada of the East, and, like our northern neighbor, is rich in wheat fields, pasture lands, great forests, priceless furs, stores of minerals, and long days of sunshine. Sometime in the future a trip across the Pacific Ocean from our Western seaports to Vladivostok and Siberia may be as easy and as popular as a tour across the Atlantic to London and the British Isles is to-day.

### TOPICS FOR STUDY

#### I

1. The Trans-Siberian Railroad.
2. The Ural Mountains and Chelyabinsk.
3. The island of Sakhalin.
4. Emigration to Siberia.
5. Siberian farms and villages.
6. The climate of Siberia.
7. The tundras.
8. The dairy industry.
9. Traveling in Siberia.
10. Omsk and Tomsk.
11. Forests and furs.
12. The old post road.
13. Irkutsk, the old capital.
14. Lake Baikal and eastern Siberia.
15. Description of Vladivostok.

#### II

1. Sketch a map of Siberia. Trace the Trans-Siberian Railroad and show the most important cities on it. Add Manchuria to your map and trace on it the railroad to Dairen.

2. Add to your map of Siberia the rivers and the surrounding waters and countries.

3. Name any very long railroads that you know in the United States; in Canada. Get some folders at the railroad station which will show you their routes and their termini. Show these on an outline map.

4. Have you ever heard of the Cape-to-Cairo Railroad? Where is it? Is it completed? What are its termini? Compare its importance with that of the Trans-Siberian Railroad.

5. Choose sides to discuss the question whether the United States or Siberia is the better fitted for a dairying country.

6. Make a list of the ten longest rivers in the world. Locate each one. How many Siberian rivers are included?

7. Describe the route by which you would send butter from Siberia to London; by which you would send tea from China to Odessa.

8. How many tons of butter could be sent yearly from Siberia by a weekly train of fifty cars, each car having a capacity of fifty-six thousand pounds?

### III

Be able to spell and pronounce the following names. Locate each place and tell what was said of it in this and in any previous chapter.

China	Lena River	Moscow
Japan	Ob River	Petrograd
Korea	Yenesei River	Revel
Manchuria	Tobol River	Riga
Sakhalin	Tomsk	London
Alaska	Omsk	Odessa
Canada	Irkutsk	Leipzig
United States	Tobolsk	Boston
Denmark	Chelyabinsk	San Francisco
Germany	Harbin	Caucasus Mountains
The tundras	Yakutsk	Mt. Washington
Ural Mountains	Dairen	Gulf of Mexico
Irkut River	Vladivostok	Baltic Sea
Tom River	Port Arthur	Lake Baikal
Om River	Irbit	Lake Ontario
Angara River	Kiakhta	
Amur River	Nizhni Novgorod	

## CHAPTER IX

### CENTRAL ASIA AND ITS PEOPLE

Our next trip will be a very interesting one, as it will take us into the heart of Asia. We shall not cross the borders of Siberia, yet we shall travel during the entire time in Russian territory. Besides her Siberian possessions, Russia controls in the interior of the continent a vast area nearly a fourth as large as the United States. This great territory, commonly known as Central Asia, consists of several provinces. The largest of these is Turkestan, a country covering nearly three times the area of California. The Transcaspian Province stretches westward from Turkestan to the Caspian Sea, while, wedged in between these territories and Persia and Afghanistan, lie Khiva and Bokhara. Thus you see that in western Asia, even more than in the eastern part, Russia has marched steadily southward until a distance of only about five hundred miles lies between her possessions and the warm waters of the Persian Gulf.

Notice on the map the line which starts from the eastern shore of the Caspian Sea, extends through the Transcaspian Province near the northern border of Persia and Afghanistan, and through Bokhara and Turkestan. That line marks the Central Asian Railroad, on which we shall travel for some time. We shall find the trip by rail much easier than the long, slow caravan journey, which not



many years ago was the only means by which one could get into this little-known part of the continent.

Remember as you look at the map of Asia that immense distances are represented there. This railroad, which looks so short, is in reality more than twelve hundred miles long. It would stretch in a straight line entirely across the United States from the Canadian border to the Gulf of Mexico. It gives to Russia great advantages in Asia over any other European nation. It enables her to put her soldiers into any one of her conquered territories at short notice, and not only her soldiers but her products and manufactures as well. To-day nearly all of the commerce of Central Asia is carried on with Russia, always excepting the tea trade, which is controlled by the Chinese.

Many people think, however, that when Russia was building the Central Asian Railroad she was thinking not so much of her increased commerce, and of future revolutions in any part of her own territory, as of the ease and quickness with which she could transport her soldiers to the Indian border. Tibet is not the only country on the borders of India across which England is watching the movements of the slow, cautious, but powerful Russian bear. The easiest approach to India is from the northwest, through Afghanistan, and England has noted with much anxiety the approach of Russia nearer and nearer to this boundary line.

Did you ever hear of a secret railroad? On the map you will find such a line which Russia has built for nearly two hundred miles from Merv southward to the border of Afghanistan. This road runs for the entire distance through a desert region, where no industries and no towns

are served by it. No foreigner has ever traveled on it, and no freight is carried on it except arms, ammunition, provisions for soldiers, materials for barracks, and railway irons and ties. What else can such a road mean except to enable Russia to rush her soldiers through to India in case of trouble with England? It seems a pity that nations should find it necessary to go to such expense in order to be ready to kill people. Think how much more this railway line would serve the world if it were continued through Afghanistan and India to the great city of Calcutta, and were open to freight and passengers. Sometime, doubtless, in a future era of international peace, this will be done, and travelers can take a railway trip from London to Calcutta as easily and safely as they now go from New York to San Francisco.

You doubtless think that if you have packed the things you will need on your journey, and have money for your expenses, you have made all the preparations which are necessary for your trip through Central Asia. Not so. If that is all you have done, you will not be able even to start on your journey, as no foreigner rides on any part of the Central Asian Railroad unless he has permission from headquarters. We must ask the American ambassador to obtain for us at Petrograd a document that we can show to officials along the route. Every courtesy will then be shown us as long as we travel on just the route described in our passport, but we shall be allowed no side trips to any places except those specified therein.

The railroad starts on the eastern shore of the Caspian Sea at Krasnovodsk, which one can reach from Europe by different routes. The easiest one, perhaps, is to sail

from Constantinople across the Black Sea to Batum at its eastern end, where we can take a train for Baku on the western shore of the Caspian Sea. The route into Asia which we shall enjoy the most, however, is by automobile from southeastern Russia to Tiflis, on what is perhaps the grandest ride in the world. It takes us over the



**FIG. 65. A SPLENDID HIGHWAY WINDS HIGHER AND HIGHER OVER THE CAUCASUS MOUNTAINS**

Dariel Pass in the Caucasus Mountains. Automobiles have taken the place of the slower wagons and caravans by which people formerly made the journey, and it will probably be only a few years before people can travel over the pass in a railroad train. A splendid highway winds higher and higher beside a rushing, dashing, foaming river; it zigzags up steep slopes with lofty, snow-capped peaks towering into the sky on one side and a narrow, dark

chasm five thousand feet deep on the other. As we mount, the cliffs grow more and more vertical and the gorge narrower and darker until, at the summit of the pass, we glide silently into the world-famed gorge of Dariel, the gateway of Europe.

From the time, ages ago, when our Aryan ancestors left their homes and hearth fires under the shadow of the Hindu Kush Mountains, to find new dwellings in lands farther west, many of the migrating peoples who have spread from Asia westward have come through this door in the great wall of the Caucasus. Through it also, in the opposite direction, the Russian army went to invade the land beyond and to bring it under the czar's control. None of these people traveled by automobile, as we are doing; neither did they have the fine highway which now winds over the mountains, but step by step, fighting their way through blinding snow and chilling winds, they made their toilsome passage.

In our journey over the Caucasus we meet neither migrating peoples nor haughty conquerors. We see, instead, immense flocks of sheep, which fill the road and block our passage and stream along the highway as far as we can see, like a white, frothing river. In the spring the panting thousands toil upward to the high pastures, where they feed for the summer; in the autumn they come running down the zigzag road to their winter shelters in the villages on the lower plains.

We pass the Russian fort built near the entrance of the gorge, the long snow sheds that protect the post wagon which carries the European mail to Tiflis, and, a little farther on, the dark stone cross which marks the summit

of the pass nearly eight thousand feet high. Then begins the dash down the steep slope into the southern valleys. On our way we pass groves of dark pines, green fields of wheat and corn, and quaint, flat-roofed villages nestling in sheltered spots on the mountain sides, where the land is so steep that the inhabitants are said never to step on level ground.

Tiflis, where we leave our automobile and take the train, is the only city of importance in Transcaucasia. It is larger than Atlanta, Georgia, and is a very important place in this part of the world. It is halfway between the Black and Caspian seas, at the crossroads of routes leading north and south and east and west, and is the terminus of the great military road over the mountains by which we have just come. The city is a combination of Europe and Asia, of the Occident and the Orient. The European in broad-cloth rubs shoulders with the sheepskin-clad dweller of the mountains. There are winding alleys lined with native huts and crowded bazaars, and broad streets bordered with fine houses and large shops. In Tiflis, as in other cities which have become a part of the Russian possessions, the native quarter and the foreign section differ as much as an automobile does from the "one-hoss shay." The modern Russian city has wide, well-paved streets, electric cars and lights, rubber-tired carriages, fine business blocks, and excellent shops. A ten minutes' ride from all this brings us to a different world. In the Russian city everything was like Europe; in the native city, centuries old, everything is Asiatic. Here are the narrow, dirty streets and the low houses with bare, closed fronts on the street side, showing nothing of the life within. Here also, as in all Asiatic

cities, the bazaar, or market place, is the center of interest and is crowded with people. What a noise and confusion ! Have we found the Tower of Babel of which the Bible speaks, where everyone used a different language ? It certainly seems so, for each person appears to be jabbering in a different tongue, and we can easily believe the statement that more than seventy languages are spoken in Tiflis. Look at the people and their queer costumes ! We pass tall, dark, dignified Georgians in black sheepskin hats, Persians with hats of astrakhan fur, Armenians with flat, close caps, and people from Bokhara with full white turbans. There are representatives of desert tribes with long, loose cloaks floating gayly out behind ; mysterious veiled women ; and unveiled Georgian beauties with large, dark eyes, black hair, and clear complexions.

What should you like to buy in the bazaar ? We shall find in the shops in one street rich old rugs woven by hand in the tents of some wandering Tartar tribe ; in another alley, some eastern perfumes warranted to last forever ; in a third, silks as brilliant as the autumn foliage of New England. In the street where jewelry and gems are sold there are turquoises blue as the skies, blood-red rubies, and gleaming pearls. Workmen clutter the streets, beggars display their infirmities, and buyers argue over prices in loud, excited voices. What is that coming up the street ? It looks like a cartload of the fattest oxen we have ever seen. They are not oxen, but ox skins filled with wine. The head and feet are cut off, and the whole skin is used as a wine cask. There is a man who wishes to buy a drink. The driver unties the cord around one of the legs and the wine bubbles out into the cup. In Eastern

countries wine and water are often carried in skins, but these are the largest and queerest we have ever seen.

We must not linger in Tiflis, however, as a long journey lies before us, and Baku, our next stopping place, is still more than three hundred miles away. Baku is a very different city from the one we have left. As we approach,



FIG. 66. SOMETIMES THE OIL WELLS GET ON FIRE AND BURN FOR A LONG TIME

we see, dotting the landscape for miles around, black wooden towers looking, as one writer has said, like enormous gravestones in a cemetery of giants. These are the oil wells for which the region is famous. Oil is everywhere, deep in the secret places of the earth, filling the pipes with which the district is tunneled, floating on the surface of the sea, roaring in the engines of trains and steamers, and stored in great black tank-boats on the Caspian. These will steam northward to Astrakhan, and

from there the oil will be distributed throughout Russia. Great pipes are laid to carry oil from the region around Baku to Batum on the Black Sea, six hundred miles away. Tank-boats, run by oil and loaded with oil, carry the product to Odessa, which, like Astrakhan, is an important distributing center for Russian petroleum. We remember seeing, as we came from Tiflis to Baku, a large pipe extending alongside the track. The oil which it carried furnished the fuel for our engine, and consequently we were not troubled by smoke and cinders on the trip. More oil is produced in the Baku district than in any region of equal area in the world. Of late years some of the wells have not produced so freely as formerly, and many people predict that the supply of oil in the vicinity will soon be exhausted. Rich wells are being bored nearer the Black Sea, where the cost of getting the oil to Batum and Odessa will be much less.

Thousands of years ago Persian fire worshipers used to come to the Baku region to worship a sacred fire, which, by a wonderful miracle, as they thought, burned continuously without fuel. We know to-day that it was fed by the oil with which the place abounds. The formation of this important product, its abundance, and its usefulness in the industrial world are marvels as great as that before which the ancient Persians worshipped. What would manufacturing establishments do without petroleum, gasoline, kerosene, vaseline, dyes, and other valuable products for which we are indebted chiefly to the oil regions of the world?

The United States ranks first as an oil-producing country, and the Standard Oil Company, which controls most of



the product, is known all over the world and sends oil from the United States to many foreign countries. We can afford to supply other nations with oil, as our annual production is so immense that the barrels which would be required to hold it, if placed end to end, would reach several times around the earth at the equator. Russia is the next largest producer, nearly her entire output coming from the region south of the Caucasus Mountains. In many other countries there are important oil fields, but their production is small compared with the immense amounts yielded by the United States and Russia.

We are glad to leave Baku, as the city is one of the most disagreeable we have ever seen. It has splendid buildings, fine stores, electric lights and cars, and many other modern conveniences, but there are no shady parks or splashing fountains, few shrubs and trees, and no green grass. Oil is in the streets and on the buildings; the people smell of it and the water tastes of it. There is no good drinking water in the city. All that is used for drinking, washing, cooking, and all other purposes is distilled from the waters of the Caspian Sea. As we take the boat to continue our journey we sail for some distance through a scum of oil. In providing fresh water for the people the oil must be got rid of as well as the salt.

The Caspian Sea is nearly twice as large as our five Great Lakes. They are fresh-water lakes, you remember, while the Caspian Sea is salt, a remnant of the old ocean which ages ago separated Europe and Africa and stretched in a northeasterly direction through western Asia to the Arctic Ocean. The Aral Sea is a still smaller remnant, and the Ob River now flows where once the salt waters of

the old ocean lay. If the land in these regions should sink a few hundred feet, a continuous waterway would again connect the Atlantic and Arctic oceans. Several hundred thousand tons of salt are taken annually from the waters of the Caspian Sea, and the soil around it is so filled with salt as to be unfit for cultivation.

It is a twenty-hours' sail in fine weather from Baku to Krasnovodsk, our landing place. We sail in a Russian boat, as no others are allowed on this great inland sea. On the steamer there are all classes of people — Russians, Armenians, Turks, Persians, Tartars, Afghans, and many others. Few of these occupy cabins or visit the dining room, as most of them have brought their own blankets, pillows, and food, and camp on the decks in true Eastern fashion.

When we land at Krasnovodsk, the Russian official eyes us rather closely as we hand him our passports. In traveling in any Russian territory one feels the force of the couplet,

Be silent; keep yourselves in curb,  
We are watched in look and word.

With the freedom of travel in our country, with foreigners constantly coming and going in our great cities, it seems queer to us to be in a place where no foreigner lands without permission. Our documents prove satisfactory, however, and as some hours elapse before our train starts for the East, we set out to explore the town.

Before we started on our Central Asian trip we had never heard of Krasnovodsk; it is a place of only a few thousand people, half of whom are soldiers; it is situated on the borders of one of the greatest desert areas in the

world, yet from the amount of freight piled on the wharves we should think that we were in some large Western city. There are hundreds of bales of cotton from the fields of Turkestan, waiting to be taken across the Caspian Sea to Astrakhan and thence up the Volga River to the mills of Moscow ; there are piles of furs and skins to be sent to London, Leipzig, and across the ocean to New York City. Cotton, furs, skins, and rugs are the chief articles exported from Central Asia, but immense quantities of goods must be brought into this desert land, for its inhabitants make very few things for themselves. There are piles of railroad ties and rails, boxes of cotton goods, barrels of sugar and coffee, tools, furniture, and other necessities of life for the millions of people who live in the heart of this immense continent. The Russians have made them acquainted with many new wants, and the Russian railroad is the only means by which these can be supplied.

Leaving the wharves, we go for a walk through the town. What a dreary place it is ! Not a bit of green grass relieves the gray-brown, barren earth. Little one-story houses of sun-dried brick stand on either side of a wide, dusty street. Perhaps to make up for the lack of color in the landscape, the buildings are painted in vivid hues — bright blues, reds, greens, and yellows. Instead of the milkman going from house to house, it is the waterman whom we see in the streets. As in Baku, there is no fresh water in the town except what is distilled from the Caspian Sea. The distilleries which furnish water for the inhabitants also supply the trains on their long trip through the desert, as well as the stations on the way. Indeed, it

has been said that the trains on the Central Asian Railroad carry more water than anything else.

Just look at the railroad station. It is a large, beautiful stone structure, much finer than many of our cities can boast. Our train leaves in the early evening, and from the crowd gathered at the station we should think that every one in the town had come to see us off. Uniformed officers, dirty soldiers, and jabbering porters crowd the platform. At last, after much whistling and ringing of the bell, we are finally eastward bound on our journey of more than twelve hundred miles. It is growing dark outside; the car is not lighted well enough for us to read; the slow, steady motion of the train makes us sleepy; so we make up our beds with blankets which we have brought with us, and sleep soundly until morning.

When we awake, the first thing we do is to look out of the window to get a glimpse of the country through which we are passing. As far as we can see, the bare brown earth stretches away to meet the sky — no trees, no grass, no shadows, no houses, no animals, no people; but far away on the desert a long caravan of camels is slowly winding its way. Hour after hour the same dreary, uninteresting, desolate country stretches beside us. Nothing breaks the monotony except, every few miles, the little stations along the railroad. At each of these lives a station master with his family. They have no neighbors nearer than those who live at the stations on either side. Each one has a storehouse near his little low dwelling, a well with a clump of trees around it, and a few cattle.

After riding for hours through the dreary, uninteresting country we begin to see small patches of grass and a few

trees. Soon these green spots grow larger, and we see cultivated land and catch a glimpse of some long-cloaked farmers working in the fields. There is a camel drawing a plow, and a little baby camel trotting awkwardly along beside its mother. Some of the men are plowing with oxen, others with a pair of camels, while still others have harnessed a camel and an ox together. Flocks of sheep and droves of camels and horses are feeding near by.



FIG. 67. ON THE DESERT A LONG CARAVAN OF CAMELS IS SLOWLY WINDING ITS WAY

Soon we pass a village of round, dark felt tents, and shortly afterward another one of low mud huts.

Central Asia is a desert dotted with green oases which remind one of islands set in the great ocean. Wherever a stream from the mountains descends to the plains, its waters are made to turn the desert into a garden. The soil is very fertile, and water is the only thing needed to make the earth produce splendid crops. To furnish different settlements with water, numerous canals branch off from each river in different parts of its course. These divide

into small ditches until the network of waterways resembles the veins of a leaf. In any one of these oases made by the life-giving streams we can stand in fields of rich green grass, waving grain, or growing vegetables, while only a few feet away beyond the irrigated area stretches the brown desert. In the Transcaspian Province, Bokhara, and Turkestan we shall ride hour after hour and day after day through long stretches of the barren, desolate wastes, where no sign of life appears save perhaps a line of camels outlined against the distant sky.

As our train crawls slowly along over the dreary, empty plain it seems impossible to realize that in this region ages ago lived those early people from whom the great nations of Europe have sprung. In the most desolate parts of the Central Asian desert, where to-day no water flows and no life is found, there are ruins (sometimes buried deep in the sand) of large cities, beautiful temples, irrigating canals, and other evidences of life and its varied activities. What became of the people, what happened to the rivers which once made these centers of population possible, what caused the water supply to cease, there is nothing as yet discovered to tell us, and scientists who have explored the region are not agreed upon the answer.

These dead cities, however, are not the only ones in the Central Asian deserts; there are living ones as well — cities which have existed for centuries as centers of life and commerce. These are situated at the crossroads of trade routes or at advantageous places on the few large rivers which find their way across the sands. The first of these cities at which we shall stop is Merv, in the southern part of the Transcaspian Province. This city, once called the

Queen of the World, of which historians have written and poets have sung, is now a small Russian town. Not far away, twenty to thirty square miles of ruins — half-destroyed columns, remains of temples, and roofless walls — testify to the size and importance of the ancient cities which have existed here, and which, one after another, have been destroyed by invading armies from the east and west.

The oasis on which Merv is located is one of the largest and most fertile in Central Asia, covering some hundred square miles. The city stands at the meeting place of old caravan routes, some leading east and west and others north and south. Here in early times traders from China and Japan, with their treasures of silks, spices, and pearls, met merchants from Europe, who would venture no farther eastward over the trackless wastes. Here Alexander the Great built a splendid city on the ruins of the one which he destroyed. Here the hordes of Mongol warriors from the east and the swarms of Tartars from the north perished by thousands in storming the city. Here again it is not impossible that armies may gather, for you remember that it is at Merv that the secret railroad of the Russians starts toward the border of Afghanistan.

We must not linger too long at Merv nor appear too curious concerning this mysterious railroad stretching southward across the sands, for in such a case the dignified Russian official would no doubt courteously but firmly insist that we take our departure by the next train.

Our next stop is at Bokhara, two hundred miles away in the province of the same name. The Bokharans enjoy greater freedom from Russian rule than the people of either Turkestan or the Transcaspian Province. Whether

or not this is an advantage is doubtful, as the government of Russia, under which life and property are safeguarded, is to be preferred to the tyranny of an ignorant despot like the Emir of Bokhara, who at his pleasure can torture or

kill his subjects or throw them into dark dungeons.

When the Central Asian countries were fighting against Russian invasion, this Emir, instead of offering resistance which he knew to be useless, asked protection of Russia. As a consequence he has been allowed to continue his rule in Bokhara, which, unlike the rest of Central Asia, has never been formally annexed to the Russian Empire.



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FIG. 68. IN ONE STREET THE MEN ARE HAMMERING COPPER

Russian territory, however, touches it on either side, the Russian railroad which has been built across the desert is its only connection with the outside world, and Russian officials control the trade. So it makes little difference whether or not Bokhara is officially annexed, as Russia can easily take it any time she chooses to do so.



One of the many queer things about Bokhara is that we may travel throughout its whole extent, and visit every town in the place, and not once see the face of a woman. Bokharans are perhaps the strictest Mohammedans in the world, and the women are always closely veiled. A trip through the city of Bokhara is not very interesting, as the houses present only blank walls to the street and all the family life goes on in the courtyard at the rear.

If we wish to see the people, the trade, and the busy life of the city, we must find our way through the narrow, crooked streets, with high mud walls on either side, to the bazaars, which are among the largest in Central Asia. There are more than thirty

streets covered with matting to keep out the hot sunshine, and each one is devoted to some particular branch of trade. On one the men are hammering copper, and the din is almost deafening; on another we find the leather workers; on a third the silversmiths are at work on jewelry and curious ornaments. In one narrow alley we see cotton goods from Moscow; in another, samovars from Tula; while in another there are hundreds of yards



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FIG. 69. THE SILVERSMITHS ARE AT WORK  
ON JEWELRY AND CURIOUS ORNAMENTS

of thin muslins from Manchester, England, which will be used for turbans. The narrow lanes are crowded with loaded camels, donkeys with bulging baskets on either side, people on horseback who have ridden in from their



FIG. 70. PEOPLE HAVE RIDDEN IN FROM  
THEIR TENTS ON THE DESERT

tents on the desert, and men with thick black beards, big white turbans, and long, bright-colored robes, bargaining at the booths. Here and there we see Bokharan women with long gray cloaks and thick black horsehair veils, and a few unveiled Russian women, but their number is small compared with that of the men.

In the center of the booths, which are so small that most of the goods are within easy reach, the merchants sit cross-legged on their mats, undisturbed by the

hubbub around. Besides these small retail shops there are large establishments where goods are sold at wholesale. Let us go into one of these khans, as they are called, and see what they are like. From China, Afghanistan, and India immense quantities of goods come by caravan to Bokhara—tea, silk, furs, skins, goat's hair and camel's hair, rugs, and a

host of other things. These are stored in the khan to await purchase, after which they are sent to Moscow and other Russian markets. In one khan is stored tea; in another, silk; in another, rugs. The business of the father usually descends to his sons, and the same families have brought their goods to the same khans for many years. Here is



FIG. 71. HIDES AND SKINS ARE ONE OF THE IMPORTANT PRODUCTS OF CENTRAL ASIA

Courtesy of Mr. B. E. Baker, Boston

one where fur is stored. It is the fur of a goat, but it is very soft and silky. We call it astrakhan because it was formerly imported into Europe through the Caspian port of that name. There are also piles of a glossy, curly fur obtained from the lambs raised in Persia; hence its name, *Persian lamb*. The best fur of this kind, however, comes from Afghanistan, and is called by the native name *karakul*. It is brought over the desert to the Bokharan khans. From there great bales of it are sent by the Central Asian

Railroad to Krasnovodsk, and thence to the famous fair at Nizhni Novgorod and to the annual fur fairs at Leipzig and London. Fur dealers from all over the world come to these places to buy their supply, and skillful workmen make the skins into the beautiful garments which my lady of fashion demands.

Another equally attractive khan is filled with Bokharan rugs. Some of these are so finely woven, so attractive in color, and so durable that people in Europe and America are willing to pay hundreds of dollars for one of moderate size. These rugs, woven from the wool of the flocks, have been made in the tents and mud huts of the wandering tribes of Central Asia. Each tribe makes only two or three different patterns, and these are woven entirely from memory. Some of the rugs are centuries old. They are handed down from father to son, and the best of them are sold only at the death of the last members of the family. The dyes which are used are chiefly from Eastern plants; they give soft, lustrous colors which are practically fadeless. Many of the rugs for sale at the bazaar are cheaper ones, poorer in color and more coarsely woven, but there are also some so beautifully colored, so closely knotted, and so softened by the years of wear as to be almost priceless.

At many of the stations and at the larger cities we have noticed in greater and greater quantities as we have come farther east the bales of cotton stacked on the platforms. The central Asiatic countries, and especially Turkestan, are among the greatest cotton-producing regions of the world, and cotton is at present the chief export to Russia. That country is giving low freight rates on cotton shipments

over its railroad, is supplying good seed, is encouraging the use of machinery, and in every way is helping the industry in these eastern colonies, which, she dreams, may in the future make her great cotton-mills in Moscow independent of any foreign-grown product.

All the way through Turkestan to the terminus of the railroad at Andijan on the Chinese border we are in the cotton country. The chief limit to its production is water. Wherever that can be obtained, the cotton fields stretch green and white; where there is no water, there lies the vast brown desert. We feel more at home, perhaps, in these cotton fields of Turkestan than anywhere else in Central Asia, as the seed that is sown and the machinery that is used for ginning and for extracting the oil from the seed comes chiefly from the United States.

Leaving Bokhara, we finally reach Turkestan, which, excepting Siberia, is the largest and the most important of all Russia's Asiatic possessions. It covers a territory nearly twice as large as Montana and contains several good-sized cities and many smaller towns, separated from one another by the great desert. Let us stop for a little while at one of the towns. They are all very much alike, and seeing one will do as well as visiting half a dozen. As we approach we see, between the narrow ditches of water, green fields of millet, wheat, and vegetables. The walls around the town and around each house are all made of mud. All that a settler in Turkestan needs in order to build his home is some of the soil around him and some of the water from one of the ditches. With his feet he kneads these into a smooth paste, and with this and some straw he fashions rough bricks, which in the hot sun become as

hard as stone. In a dry country like Turkestan these last very well, but a few good rains would leave little of his house standing. On either side of the narrow, crooked alleys which serve as streets, mud walls shut out from the homes the gaze of the curious, and the family life is



FIG. 72. NOTHING BUT THE MUD WALLS IS VISIBLE ON EITHER SIDE OF THE STREET

carried on in privacy in the rear of the houses. Here the children play, the men smoke their long pipes or enjoy their daily nap, and the women perform many of their household duties. The canal which is found in every courtyard supplies the water for washing, drinking, and cooking, and also for the gardens and fountains which often make the place beautiful.

Each house has two courtyards and two sets of rooms, one for the men and one for the women, and each sex keeps strictly to its own quarters. Not even a husband may enter his wife's apartments if some shoes left outside the door indicate that she has callers. The men of the family entertain their company and eat their meals in their part of the house, and the ladies in their rooms do the same. In some of the houses, especially in the cities, the Russians have introduced tables, chairs, beds, lamps, and other modern conveniences, but most of the people live as their ancestors have lived for centuries. The houses are all low, one-story buildings, for in this earthquake region these are much safer than taller ones would be. The floors are covered with rugs, which vary, according to the wealth of the owner, from the finest oriental patterns in the homes of the rich to coarse reed mattings in the huts of the poor.

There is very little furniture in the houses. The folded quilts on which the people sit in the daytime are the beds at night. In a woman's apartment a trunk which has come all the way from the fair at Nizhni Novgorod holds her clothing, her long gray outer garment, her high leather stockings, her silken trousers, her heavy silver bracelets, and her coral chains. Other articles, if she has them, may be stuffed into her pillow or hung on a line stretched across the room, which serves for both closet and pantry.

Some of the food is cooked over a pan of charcoal and some in a clay oven, which is used in much the same way that our ancestors in New England used their old-fashioned brick ovens. The fuel is put in, and the fire is lighted and kept burning until the oven is very hot; then the coals and ashes are removed, and the bread, made in round, flat

cakes, is placed on the floor of the oven or stuck onto the sides, where it is slowly and thoroughly baked.

The people of Turkestan live very simply, and the preparation of their meals takes but little time. A little bread and a few raisins or a piece of a melon make a satisfactory meal, especially if one is traveling. For a heartier diet a mutton stew with vegetables in it and rice boiled in milk



FIG. 73. THE DRIVER OF AN ARABA SITS ON THE HORSE, WITH HIS FEET ON THE SHAFTS

Courtesy of Mr. B. E. Baker, Boston

are common dishes. Sometimes the cooking is done out of doors over a fire fed by cotton seed mixed with the waste left after the oil had been extracted. The people of Turkestan manufacture cottonseed oil for cooking and lighting, but they do not export any great amount, as it costs too much to transport it to the markets of the world.

A man might live in one of these queer towns for days, or even for weeks, without meeting a woman in the streets,



and no matter how long his stay might be or how friendly he might become with the men of the place, he would never see a woman's face. Some ladies never go beyond the mud walls which surround their homes. Those who do venture into the streets never go on foot. Ladies of the upper classes



FIG. 74. SOMETIMES A SMALL DONKEY CARRIES SEVERAL MEMBERS OF THE FAMILY ON HIS BACK, ONE BEHIND THE OTHER

ride in arabas. These are rude carts with two wheels at least six feet in diameter. The driver sits on the horse, with his feet on the shafts. In going uphill he is obliged to stand up and let his whole weight rest on the shafts in order to keep the cart in a horizontal position. The poorer women ride on horseback, each on a pillow behind her husband. Sometimes a donkey or a horse carries several members of the family on his back, one behind the other.

We need not be afraid of getting lost in a Turkestan town, for all the winding, crooked streets will take us to the bazaar. There is a fascination in looking at the queer



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FIG. 75. HEAVILY LOADED CAMELS FILL THE NARROW STREET

sights, and there is no better place in which to get an idea of the life, the customs, and the industries of the people. See that sun-burned merchant squatting among his wares. On one side of him is a pile of cottonseed cakes which will

be sold for camels' food, and on the other some oddly shaped bottles molded from the same material and filled with cotton-seed oil. Look at the great piles of cotton cloth. The fiber of which this was made was brought from far across the desert on camels loaded as heavily as those which now fill the narrow street. It was sent over the Central Asian Railroad to the mills of Moscow to be manufactured, and then followed the same route back to the bazaar.

Let us go into the silk bazaar and see the gorgeous colors which are displayed there. We should think them almost too brilliant to wear, but these Eastern people like them, perhaps because in the brown desert and in their mud-colored houses they have very little else that is bright and attractive. Next to cotton, silk is the most important export of Turkestan, and many mulberry trees are grown to furnish food for the silkworms. See those men in that little low mud house, at work on their rude homemade looms. The cloth which they are weaving, though rough and coarse, is firm and strong and looks as if it would wear far longer than much of the silk that we buy. Do you wish to purchase something in the bazaar? You will have some difficulty in making a choice among such a variety of goods, for

"Here are Persian carpets, ivory and peach bloom,  
Tints to fill the heart of any child of man,  
Here are copper rose bowls, leopard skins, emeralds,  
Scarlet slippers curly-toed, and beads from Kordofan.

"Water sellers pass with brazen saucers tinkling;  
Hajjis in the doorways tell their amber beads;  
Buy a lump of turquoise, a scimitar, a neckerchief  
Worked with rose and saffron for a lovely lady's needs.

"Here we pass the gold-smiths, copper, brass, and silver-smiths,  
All a-clang and jingle, all a-glint and gleam ;  
Here the silken webs hang, shimmering, delicate,  
Soft-hued as an afterglow and melting as a dream.

"Buy a little blue god brandishing a scepter,  
Buy a dove with coral feet and pearly breast,  
Buy some ostrich feathers, silver shawls, perfume jars,  
Buy a stick of incense for the shrine that you love best."

It seems queer to be in a place devoted to shopping and bargains and see no women around. No ladies of the upper class and few of any station of life ever go to a bazaar. Their husbands or other male relatives do their shopping for them, and they drive as good bargains as the women possibly could.

The sun is nearly down, and we must hasten away, as the bazaar closes at sunset and the merchants are already beginning to put up the shutters. The little shops have neither windows nor doors. In the daytime the whole front is open, and the merchant sits cross-legged in the midst of his goods. Perhaps you are wondering what he does in winter, for, though the summer days are intensely hot, the winter days are very cold. It would make you laugh to walk through the bazaar in cold weather. You might think that you were walking through a ward in a hospital. The merchants are sitting a little farther back in their booths than in the summer time, and each one has the lower part of his body covered with a heavy quilt. Under this, near his feet, is a pan of charcoal, and the heat of the glowing embers confined under the quilt keeps him comfortably warm.

Look at that barber plying his trade in the streets. Perhaps *head-shaver* would be a better name than *barber*, as the men never have their beards cut. They keep their heads closely shaved and covered with a loosely folded turban of thin cloth. Fashions change but seldom in the East, and these people have worn the white turban and the long robe with its loose girdle ever since the time of Mohammed.

Having seen something of one of the little towns of Turkestan, we will now go to one of its great cities. Tashkend, more than eleven hundred miles from our starting place at Krasnovodsk, is the largest city of Central Asia. As we ride from the station we notice first of all the very wide streets and the gurgling streams on either side, which, though pleasant enough in the daytime, are the homes of so many frogs that sleep is impossible until one gets used to their noise.

No street could be made too wide for the crowd in an Eastern city. What queer-looking people they are! We shall never get used to the white turbans crowning the dark faces, the loose robes and wide sashes, the bright-colored, close-fitting caps and big fur hats, and the shapeless gray cloaks and thick veils of the women. Look at the people on horseback. There goes a Russian officer on a splendid prancing horse, and here comes a donkey carrying a countryman with his two small boys behind him. A velvet-footed camel swings silently by with two black-bearded natives on its back, swaying as they ride. That little rough-coated Mongolian pony looks altogether too small for the high cart to which it is fastened, the wheels of which are much taller than its head.

We shall enjoy our visit in Tashkend more than in most Eastern cities, as in many ways it is cleaner and pleasanter. There are so many trees on the streets and in the gardens that the city seems like one big grove. Tashkend is fortunate in having plenty of water. The river which supplies it comes from the mountains thirty miles away, and the melting snows keep it full even in the hottest, driest months of summer.

See those men watering the streets! They dip up the water in buckets from the brooks, and dash it over the road. Were it not for this daily watering, the dust would become ankle deep, as only a little rain falls in Tashkend, and that comes during the winter.

Those large, low buildings, almost hidden by the trees and the high walls, are barracks for the thousands of Russian soldiers who are stationed here. The electric cars will take us to almost any place in the city which we wish to visit. We prefer to ride rather than to walk, as Tashkend covers as large an area as the city of Paris. The ride will not be very interesting, however, as the buildings are all of one story, and are so surrounded by high walls and hidden by trees that it is impossible to see much of them. The little shops are open to the street, but all the business houses are in compounds, as the walled inclosures are called. A compound contains the business office, the warehouse, and the residence of the owner, together with gardens, groves, orchards, and irrigating streams.

We shall find in this new Russian city all modern conveniences. Besides the electric cars there are electric lights, telephones, public carriages like those at Petrograd, fine shops where everything is sold at high prices, theaters,

moving-picture houses, churches, banks, cafés, clubs, a public library, a museum, and many fine residences.

Things are very different, however, in the old native city of Tashkend, though this is much pleasanter than most of the native cities of the East, owing to the plentiful water supply and the many trees. The houses are built of mud and are painted all the colors of the rainbow. The roofs are made of clay and sod thatched with reeds. Seeds blown by the wind soon take root on them, and many are like brilliant gardens. Can you imagine how pretty some of these streets must be, with the low, brilliantly colored houses half concealed beneath the shade of a big oak or elm or maple? The roof gardens, the swift-running water, the dark, handsome children, the men dressed in brilliant colors, and the women with their faces covered with black horsehair veils make up an interesting picture but a strange one to Western eyes.

Tashkend has one of the largest bazaars in Asia. Under the mattings stretched over the streets to keep out the fierce rays of the sun are nearly five thousand booths. The shops are similar to those which we have visited in other places, so instead of spending time there we will go to the schools.

Russia seems as much interested in educating her people in Central Asia as in her home territory. There are schools for the Russian boys in the modern part of the city and schools for the natives in their quarters. The native schools interest us more, because they are so different from ours. There is nearly as much hubbub here as in a Chinese school, as each boy studies aloud and repeats in a sort of singsong what he is trying to learn. There are no classes, but instead each pupil recites by himself. The teacher is poorly

dressed, but he can afford nothing better, as he receives little pay except what comes as presents from the parents of the pupils. In the smaller towns there are no schools for the girls, but in Tashkend and some of the other large cities girls' schools have recently been started. School begins in the early morning and is held all day, with a little time for the luncheon of bread and fruit which most of the children bring with them. The sessions are from Saturday morning till Thursday afternoon. Most of these people, you remember, are Mohammedans, and for them Friday is the day of worship.

Our trip over the desert and oases and through the cities of Central Asia has been interesting, but there are many parts of the continent as ancient and as interesting, which as yet we have not seen. So we will retrace our steps until we are near the northern boundary of Persia, and from that point will make a trip southward into another waterless country.

### TOPICS FOR STUDY

#### I

1. Russian possessions in Central Asia.
2. The Central Asian Railroad.
3. Preparations for our trip.
4. Routes from Europe to Central Asia.
5. The Dariel Pass.
6. Transcaucasia and the city of Tiflis.
7. Baku and its oil fields.
8. The Caspian Sea and Krasnovodsk.
9. The Central Asian desert and its oases.
10. The Transcaspian Province and Merv.
11. The province and city of Bokhara.
12. The cotton industry of Central Asia.
13. Turkestan and Tashkend.



## II

1. On a map of Asia show the Russian possessions. Indicate the chief cities; the two great Russian railroads and their termini; the secret railroad.

2. Write a list of the countries and the important cities passed through in a trip from Moscow to Andijan.

3. Describe the route by which oil is sent from Baku to Moscow and Odessa.

4. Where in the United States is oil produced?

5. Write a list of the reasons why you would rather live in the United States than in Central Asia.

## III

Be able to spell and pronounce the following names. Locate each place and tell what was said of it in this and in any previous chapter.

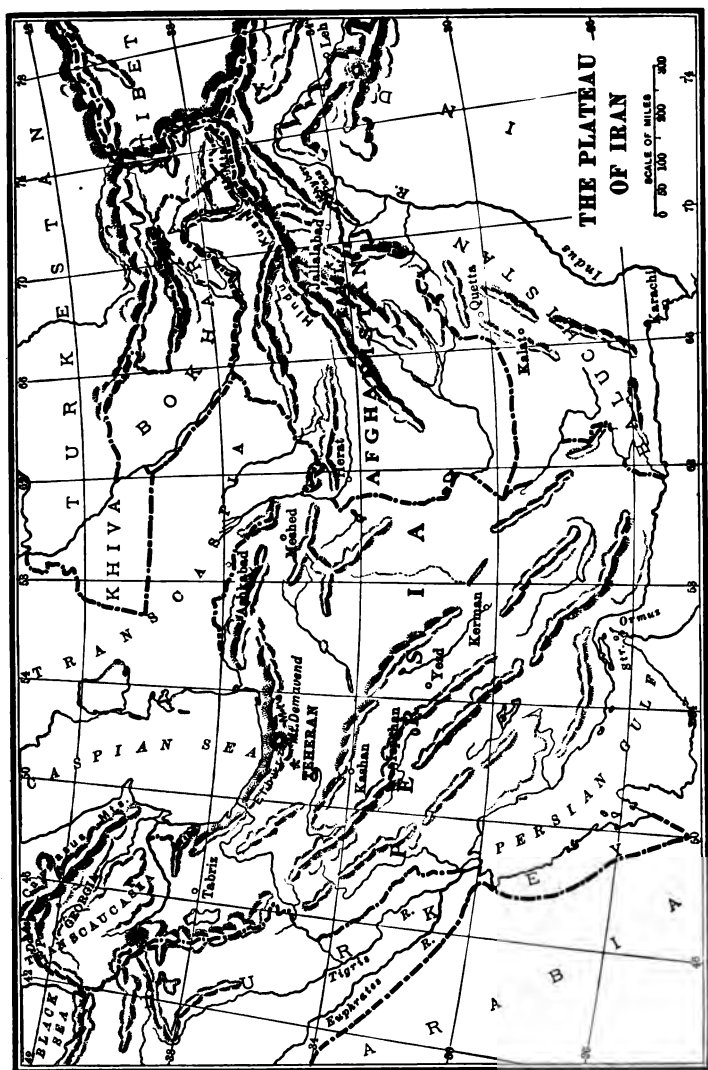
Siberia	Ob River	Tashkend
Transcaspian Province	Volga River	Nizhni Novgorod
Khiva	Caspian Sea	Paris
Bokhara	Black Sea	London
Transcaucasia	Sea of Aral	Petrograd
Turkestan	Persian Gulf	Astrakhan
Georgia	Gulf of Mexico	Constantinople
Armenia	Caucasus Mountains	Odessa
Persia	Hindu Kush Mountains	Moscow
Afghanistan	Dariel Pass	Leipzig
Tibet	Andijan	Manchester
India	Merv	Calcutta
Russia	Krasnovodsk	New York
China	Batum	San Francisco
California	Baku	Atlanta
Montana	Tiflis	

## CHAPTER X

### LIFE ON THE PLATEAU OF IRAN

Once upon a time, as a Persian story-teller would say, there was a powerful kingdom in southwestern Asia. It had a strong, wise ruler and a large army, and contained busy cities, great temples, and wonderful gardens. Some five hundred years before Christ, King Cyrus had made this country, which you have already guessed is Persia, one of the chief kingdoms in Asia. After him the great Darius, in trying to extend his dominions westward into Europe, was driven back on the plains of Marathon by a little Greek army numbering only a fifth of the Persian hordes. Still later Xerxes the Great collected the largest army the world had ever seen — splendid fighters of Persia and of many conquered tribes. They had defeated country after country throughout Asia, and had annexed to the Persian Empire kingdom after kingdom; yet Xerxes and his great army, in trying to extend their possessions westward, were repulsed at the celebrated pass of Thermopylæ by Leonidas and his little band of three hundred brave soldiers.

Wars continued and battles raged through many centuries. The country was conquered by the Macedonians under Alexander the Great; it was overrun in turn by the Arabs, Mongols, and Tartars, until to-day Persia is but a shadow of the mighty kingdom which at one time was the most powerful in Asia. In our journey through the country





we shall see but little of its ancient glory. Nothing remains to tell us of its wonderful past except crumbling ruins of vast irrigation works, splendid cities, immense palaces, and magnificent tombs.

The people of Persia call their country Iran and themselves Irani. You will find on your maps the plateau of Iran, and you will see that it includes nearly all the region between the Euphrates and the Indus river basins. Afghanistan, one of the countries included in the plateau, is nearly as large as Texas. It is a bare, rocky land with snow-capped mountains and a few fertile valleys, where most of the people live. Since Tibet has been opened to strangers through English efforts, Afghanistan is the largest closed country of the world. No subject of any foreign nation is allowed within its boundaries except by a special permit issued by the Ameer. This permission is not easy to obtain unless the person seeking it represents some firm with whom the Ameer has business, or wishes to introduce some goods in which he is especially interested. In such cases the ruler provides a military escort and guarantees the traveler's safety. The full title of the ruler of Afghanistan is "Ameer of Afghanistan and its Dependencies and Light of the Nation and the Faith." He and his court are dressed very much like the people in the United States and have many modern interests. They play golf and cricket and polo; in the palace are American roll-top desks, American typewriters, and clerks who use American fountain pens. Though there are few good roads in the country, the Ameer does not lack for conveyances. He cannot ride in a railroad train, for there are no railroads in Afghanistan, but he owns more than fifty motor cars of different kinds, an equal

number of elephants, and several beautifully decorated state carriages given him by the late Queen Victoria.

The ruler and the court live during most of the year at Kabul, in a palace the grounds of which are surrounded by barbed-wire fencing. The capital is about the size of Kansas City and is located between six and seven thousand feet above sea level. The weather is severely cold in winter, and for a few months the Ameer and his court go to Jalalabad, which, because it is situated at a lower level, is not so cold as Kabul.

Though the Ameer and his court live in a palace with many comforts and modern conveniences, most of the people of Afghanistan live in huts made of sun-baked mud bricks. These are covered with heavy mats made of rushes, on which is smoothly spread a roof of mud several inches thick. Inside the house several shelves, also of mud, hold the family possessions. Though the winters are cold, a hole in the earth floor or in the better houses an iron pot filled with charcoal is the only heating apparatus. Around this, during the winter, the people, covered with heavy quilts, spend much of their time.

The barren soil, the intense heat of summer, and the bitter cold of winter will forever keep Afghanistan a thinly populated region. Its chief importance is due to its situation. It lies between two centers of ancient civilization, that of India and that of the nations in the Tigris and Euphrates river basins. The trade routes connecting these two places run through the mountain passes of Afghanistan.

The easiest approach to-day from western Asia to India is through Afghanistan. Herat and Kabul, the two chief

cities, are often spoken of as the keys to the English possessions. Since Russia has pushed her way farther and farther south in western Asia, Afghanistan is to-day wedged in between Russian and English territory, and is for this reason often called a buffer state. Both Great Britain and Russia are glad to have as much influence as possible with the cruel, despotic Ameer, so that he will make no treaties with other nations which are harmful to their interests.

The territory shown on old maps as Baluchistan is now included under British possessions. Few people realize the size of this little-known country. If the British Isles were placed on Baluchistan, there would still be room for thirteen thousand square miles of surrounding sea. The number of people in Baluchistan is considerably less than the number born in the British Isles in a single year. The city of Quetta, some fifty or sixty miles south of the Afghanistan boundary, is the largest city and is the residence of the British Agent who administers the government. Quetta is more than ten times larger than Kalat, which is described in many old geographies as the largest city.

Much of the surface of Baluchistan is a barren wilderness, with a very irregular and scanty rainfall. All crops depend on irrigation, but the difficulty is to find a sufficient and convenient water supply. Most of the rivers are dried up much of the time, but any rainstorm will cause sudden floods that do great damage.

The southern part of Baluchistan consists of rugged, sunburned mountains alternating with dry wastes and stony plains. But as we approach Quetta we find level valleys of considerable size, where, by means of irrigation, rich crops,

especially fruits, are raised. Large quantities of fruit are brought also from southern Afghanistan by camels and donkeys. In the irrigated area around Quetta there are orchards of peach, pear, plum, and apple trees, vineyards, and melon patches. The fruit exported from Baluchistan and Afghanistan furnishes the chief freight for the railroad into India, and is known in that country as Quetta fruit.



FIG. 76. MOST OF THE SO-CALLED TOWNS ARE ONLY GROUPS OF TENTS BELONGING TO WANDERING TRIBES

During the season a train of ten or fifteen cars runs daily from Quetta for the distribution of fruit to the leading cities of India. The English government has already spent large sums of money in extending irrigation and in developing the fruit industry of Baluchistan, and is planning for further outlay in the future.

There are no really large cities in Baluchistan, and most of the so-called towns are only groups of black tents or mud huts. These are usually partitioned in the middle, and the family occupy one part and the flocks and herds the other. As you can imagine, these are bare, comfortless



homes. Most of the people are nomads and move from place to place according to the season and the pasturage. Some of them have little patches of wheat, which is the chief food grain of the people, and also small fields of barley and corn. As we pass through southern Baluchistan we shall see groves of date palms on every oasis, and in the season we shall find every person busy picking and packing the fruit, which in many places is the sole crop raised.

Persia is the most important country included in the plateau of Iran. It is so large that if a map of it were laid on one of the United States made on the same scale, it would more than cover the six states of Washington, Oregon, California, Nevada, Arizona, and Utah. It is a plateau bordered by mountain ranges. These highlands shut out the moisture from the interior, making it so dry that it is said that iron and steel will not rust if left during the night in the open air. Most of the rivers dry up in summer. From Teheran, the capital, to the mouth of the Indus River, a distance in a straight line of more than a thousand miles, there is no river more than two feet deep. In nearly all parts of the country irrigation is necessary for the production of crops. The hot sun and the dry air cause such rapid evaporation that the water is brought from the hills in underground channels, which are difficult both to build and to keep in repair.

If we were going into Persia from Europe, our route would lie through Transcaucasia. On the Russian border we should find a railroad leading to Tabriz, more than ninety miles away. Most of the commerce of Persia is carried on with Russia, and Tabriz, lying directly on the highway between the two countries, has become the chief

commercial center. It is about as large as Kansas City, but oh, so different! It has low mud houses with flat roofs, dirty, narrow streets filled with camels, mules, horses, porters, and carts, and the bazaars common to all Eastern cities. In the bazaars are miles of narrow covered lanes lined on either side with cotton, woolen, and silk stalls ; charcoal,



FIG. 77. TABRIZ HAS MUD HOUSES WITH FLAT ROOFS AND NARROW STREETS

wheat, and carpet depots ; butcher shops, jewelers, stands, fruit stores, and candy shops. The sparks fly from the blacksmiths' booths, the hammers ring in the coppersmiths' lane, and the samovars shine in the brass-workers' shops. The crowds are so great, the alleys are so narrow, and the smells are so bad that no foreigner ever wishes to stay in any Eastern bazaar very long at a time.

You remember that when we were in Turkestan we decided to return on the Central Asian Railroad until we were near the northern boundary of Persia, and to enter



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FIG. 78. THE HAMMERS RING IN THE COPPERSMITHS' LANE

the country at that point. So at Ashkabad, a town in the Transcaspian Province, we will leave the train. We will take a long last look at the railroad station half hidden by locust and mulberry trees, and at the wide, well-shaded

streets with their streams of running water. We shall not find many pleasant streets in Persia, nor shall we see other railroad stations, for in the whole length and breadth of the land there are but few miles of railroad.

Ashkabad is thirty miles from the Persian border, and the Russians, who control nearly everything in northern Persia, have built a good road not only to the boundary line but eighty miles beyond it to Meshed, a city which, on account of a saint who is buried there, the Mohammedans hold in highest reverence, and visit by thousands to worship at the tomb. In many parts of Asia the old highways, traversed by thousands of pilgrims going to worship at their holy places, have become important trade routes.

To accommodate those who can afford to ride, coaches run from Ashkabad to Meshed, and by taking one of these we shall reach the sacred city in five days. We cannot help thinking that this fine, hard road will enable Russia not only to carry pilgrims to their shrine but also to put her soldiers into Persia at short notice if trouble arises, and we wonder which thought was uppermost in the mind of the Russian government when it sought permission of Persian officials to build the road.

On our way to Meshed we meet endless lines of camels swinging steadily northward, while the bell which each one wears keeps up a monotonous tinkle. Equally numerous are the caravans of heavily laden mules following in single file a sturdy little horse that leads the way. If we could examine the packs with which the caravans are loaded, we should learn many of the occupations of the Persians. We should find hundreds of bales of raw cotton, silk, and wool, bags of wheat, barley, and oats, and rolls of beautiful

carpets and rugs. The caravans southward bound carry chiefly Russian manufactures, such as cotton and woolen cloth, hardware, matches, and great quantities of sugar. The Persians are very fond of sweetmeats and candy, and



FIG. 79. WE MEET ENDLESS LINES OF CAMELS

they consume, especially during the hot season, a large amount of delicious sweetened fruit juices called sherbets.

The Russians have built another road, stretching southward from near the Caspian Sea to Teheran. With the exception of what is called the King's Highway, which extends a few miles north and south from Teheran, these two Russian roads are the only real highways in Persia.

The other so-called roads are merely rough, stony tracks, made by countless caravans which for centuries have been constantly crossing the country. Persian horses wear a shoe which nearly covers the foot. The narrow ring of steel commonly worn in our country would be of little protection against the sharp stones covering the paths, which often lead up river beds sown with bowlders, across stretches of hard gravel, or over solid rock. In such cases they are difficult to follow, and if one gets off the path, it is not easy to find it again or to distinguish the right one.

There are several ways in which we can travel through Persia. One is by post horse, taking very little baggage with us and stopping at the resthouses on the way to sleep and eat and get fresh animals. The places are filthy and noisy, we should probably not be able to eat the food, and the horses might all be taken by some traveler just ahead of us; in this case we should be forced to remain in an unpleasant village or dirty posthouse for a day or two before we could continue our journey.

In parts of the country we can obtain carriages, if it is proper to call such rickety vehicles carriages, but a journey through Persia in a carriage would not prove so pleasant as it sounds. While the horse was in the narrow footpath the wheels on one side might be deep in a hole and those on the other side on top of a bowlder. After being made black and blue by a ride of a few miles, you would be glad to change your seat in the carriage for one on the back of a horse or a mule or even a camel.

Our third and last choice is to go by caravan, which, though slower, is sure to be more enjoyable. We shall carry with us our tents, bedding, food, and other necessities.

We shall sleep on the open plain under the glittering stars, cook our own food, travel at our leisure, and in this way make the trip a little more comfortable. Traveling in Persia is at best hard and tiresome, even though all possible preparations are made for comfort.

While at Meshed we should like to see some of the beautiful rugs which many of the pilgrims have spent years in making, and which they have brought with them as offerings at the shrines of the buried saints. Very lovely rugs are also made near the shrines, and these the pilgrims buy to take home with them as mementos of their visit. Rug-making is one of the great industries of Persia, and rugs are more valuable than any other export. People sometimes pay thousands of dollars for a genuine old Persian rug.

Beautiful rugs are made by the people in other parts of Asia, — in Turkey especially, in the Russian provinces of Central Asia, and in Afghanistan, Baluchistan, China, and India, — but the Persian rugs are considered superior to those of any other country. In the tents and mud huts of these Asiatic tribes there are no tables, chairs, beds, or couches, such as we have; the people sit, eat, and sleep on the hard-beaten earth floor. In very early ages they probably used the skins of animals to sit on and to wrap themselves in while they slept. Later they made coarse mats of reeds and fibers to cover the cold ground.

The inhabitants of western Asia were originally, as many of them are to-day, wandering tribes, living chiefly on their flocks of sheep and goats. These early peoples were probably not long in discovering that the soft coats of their animals, as well as their flesh and milk, were of

great value. The men spent their time in hunting, in cultivating the soil and threshing the little grain that was raised during the summer, in caring for the flocks and herds and in shearing them. The women and girls spun the wool into yarn and wove it into rugs. Time was no object, as they had little to do besides their weaving, and they could spend as long as they chose on their work. No wonder they grew to love it and tried to make the rugs as beautiful as possible. So closely are some of these old rugs woven, and so many are the knots that are tied in them, that it took months to finish one small piece. Little children, when only five or six years old, began to help their mothers. Young girls worked for years on rugs which were to be a part of their marriage dowry. Each tribe, and sometimes each family, had its own special pattern, which was handed down from one generation to another. All worked from memory and no patterns were used.

As the men tended the flocks on the hillsides they became acquainted with the plants and shrubs around them. They experimented with the roots, berries, bark, and leaves, and thus learned to make dyes with which they colored the yarn that the women had spun. No colors in the world are more beautiful than those made by the wandering tribes of Persia and other Eastern countries, and rugs dyed with them do not fade, but grow more soft and lovely with the passing years.

Many of the old oriental rugs are small, as most of them were made, not to cover floors, but to furnish seats. In the old mud houses the chief of the tribe or the head of the family sat on a raised bench at the end of the room, while along either side were low mud benches. To cover



these seats long, narrow rugs were made in pairs, and smaller ones two or three feet long accommodated other members of the household around the fire. These rugs were the most treasured possessions of the family. They



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FIG. 80. THE MEN TENDED THEIR FLOCKS ON THE HILLSIDES

would no more think of selling them than you would think of selling your bed or your table. People are willing to pay immense sums for these rugs since they have learned how lovely they are, but it is not always easy to obtain them.

Merchants, seeing the demand for these Eastern rugs, began to hire them made. There is to-day no lack of

workers, but in weaving for money they no longer give the slow, painstaking care which made the antique rugs so valuable. Still hundreds of beautiful rugs, some coarser, some finer, are being made all over western Asia. In many cases European merchants supply the wool and even the patterns, and the girls and women, boys and men, weave as fast as they can. In every city of Persia into which we shall go we shall find rugs for sale, and in every village which we shall visit we shall see women and girls and even little children weaving as fast as their fingers can fly.

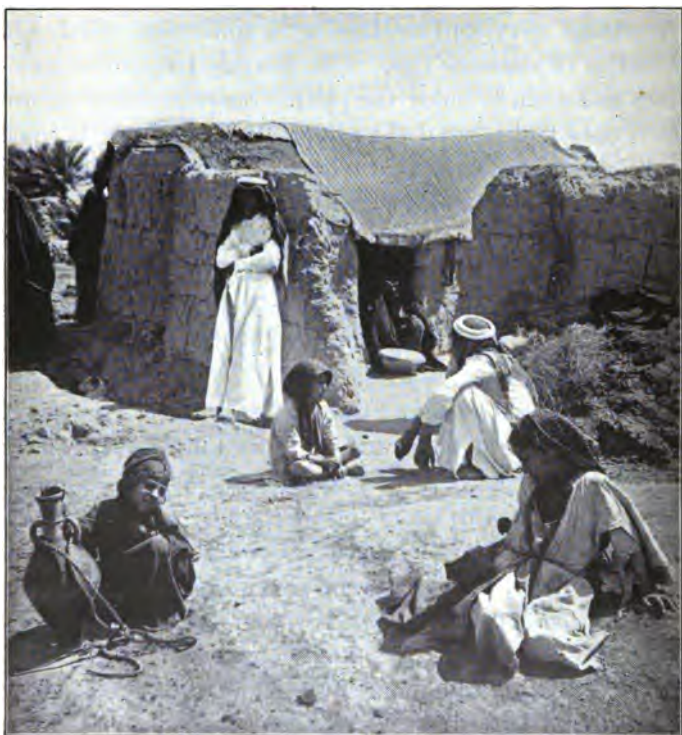
Most of the rugs displayed in the bazaars of Eastern cities are coarse and cheap. The finer ones are bought up by native merchants, by representatives of large European and American firms, and by rug collectors, who ship them to their business houses or their homes or to some large center like Constantinople.

Days pass, one after another, as we journey southward. Each morning we start on our way very early, perhaps before four o'clock, as by eight or nine the sun, beating down on the unshaded plain, is so hot that it would be dangerous to brave its rays. We put up our tents and creep into them, thankful indeed if a cliff lends its shadow to ward off the fierce heat. The buzzing of the flies outside our mosquito netting sounds to our drowsy ears like a distant orchestra. We sleep through the hot hours as the Persians do, and when the sun creeps behind the distant hills, we spread a cloth on the ground in front of our tent and eat our supper. The round, flat cakes of Persian bread will serve us for plates, which we can eat after the rest of the food has disappeared. In the towns we can obtain mutton, fowl, and plenty of fruit, as Persia is noted for

its yellow apricots, juicy melons, refreshing pomegranates, delicious figs and dates, and fine grapes; but for the greater part of the trip we shall have to depend on the canned foods which we bring with us. Our Persian guide and servants are very well satisfied with some rice, bread, and a handful of dates or figs. The animals forage for themselves and seem to enjoy the prickly thorn and low shrubs which they find around the camp. To keep them in good condition for the long, hard trip they are given other food also. We never tire of seeing the camels fed. The driver puts down on the ground a bundle of straw and makes the camels kneel in a circle around it. When, after much groaning and grumbling, they are all in position, he puts into each open, outstretched mouth balls of barley dough which he has molded with his hands.

After supper is over, and the stars, and perhaps the moon, have come to light us on our way, we take up our march once more and move slowly along until nearly midnight, when we are glad to camp for the night. Thus we travel on over the plains, sometimes glistening white with salt, sometimes black with volcanic rock, and sometimes covered as far as the eye can see with yellow sand. We journey day by day toward the hills which bound our horizon, and, crossing them, we find ourselves in another barren plain bounded also by hills or mountains. Indeed, most of the surface of Persia is a succession of bare, dreary plateaus crossed by ridges of hills. We pass ruins of ancient cities, crumbling walls, loose stones, and piles of broken brick, forever telling their silent story of the power and splendor of the great centers which once dotted the desert country through which we are traveling.

A cry from our guide, and we notice ahead of us a thick yellow cloud. We have scarcely time to close our eyes and bow our heads before the sand storm is



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FIG. 81. LET US STOP AT THIS LITTLE VILLAGE

upon us. When it has passed and we venture to look about, we find ourselves powdered like a miller in his floury coat, every fold of our clothes carrying its load of sand, and our cheeks cut by the fine grains.

Let us stop for a time at this little Persian village and see how the people live. As we approach we can scarcely see the low, flat-roofed mud huts, as the mud wall around is higher than the houses. Through the fields of wheat and the melon patches outside the wall flows a stream of dirty water, brought in an underground channel from the hills in the distance. See those women washing on the banks. How queer they look with their faces closely veiled and their feet and legs bare to the knees. Many of the settlements in Persia are nomad villages like the one we are visiting. The people live here through the winter, and in the summer the women and some of the old people and children are left here to care for the crops while the rest drive the flocks and herds to the high pastures on the hills.

Every city and town and village in Persia is supplied with running water. Little ditches and canals pass through courtyards and gardens and streets. Each person is allowed for his crops the use of a certain amount of water, which is let into the trenches in his garden by the water keeper and allowed to flow for a certain number of hours every ten days. No one is allowed to use more except for washing and cooking. Persians believe that running water is always pure; so they have no objection to the women washing and the animals wading in the stream which is to supply a whole town with water for cooking and drinking.

Some of the men are plowing while others are at work on the threshing floor. Look at that man driving an ox and a mule round and round over the grain to tread out the kernels. There is another throwing spadefuls of grain into the air. The wind blows away the chaff and the wheat falls in a pile at his feet.



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**FIG. 82. THE GOATSKIN IS FULL OF MILK, AND THEY WILL KNOCK IT  
BACK AND FORTH UNTIL THE BUTTER COMES**

As we peep into one of the houses we can see a woman baking bread. She has made a dough of barley and water and is kneading it into flat cakes. She pulls the coals out of the brick oven and with a quick motion of her hand slaps the big round cake onto the hot bricks. Another goes

onto the side of the oven and still others onto the top. In a few minutes they are done and she offers us one. They are hot and crisp and would do very well if we could always have them fresh, but when stale they are hard and tough.



FIG. 83. THE PEOPLE HAVE A QUEER WAY OF GETTING WARM. THEY CREEP IN A CIRCLE UNDER THE HEAVY RUG WHICH COVERS THE PAN OF CHARCOAL

There are two women knocking a skin bag suspended from a tripod of sticks. Are they doing gymnastic exercises? No, indeed, they are making butter. The goatskin is full of milk, and they will knock it back and forth until the butter comes.

Persia is very cold in winter, and the houses with their mud floors are not very comfortable. The people have a

queer way of getting warm. In the floor, in the center of the room, is a dish of burning charcoal covered with a heavy rug. The family creep in a circle under the thick covering, and thus their feet and the parts of their bodies which the rug is big enough to cover are kept warm and comfortable.

The lamp they use is a dish filled with palm oil in which is a twist of cotton. It gives a very feeble light, but the people have no books and papers and could not read them if they had. When they are not traveling, they go to bed at dark, and so have little use for artificial lights.

As we travel farther south the increasing number of caravans and the numerous riders on mules, camels, and horses tell us that we are approaching Teheran, the capital of Persia. It is built of the mud on which it stands, and so cannot be seen for any great distance. As we come nearer we see its mud walls and behind them the green trees lining some of the streets and ornamenting the gardens which are a part of the establishment of every well-to-do Persian. Above the trees shine the blue domes and slender minarets of the mosques.

In the European quarter, where the foreign ministers live, there are broad, shaded streets, but even in these streets there are large holes here and there, made by some enterprising Persian who needed more mud to complete his house. The open tramcars, the gas and electric lights, the well-built houses, the carriages, the telephone poles, the drug stores, and the restaurants make us feel that we have been suddenly transported to some European or American city.

A walk in the native quarter, and particularly in the bazaars, drives away any such thought. We push our way



through the dirty, narrow alleys among the swarms of people "some in rags and some in tags and some in velvet gowns." There are tall, turbaned priests, filthy beggars, veiled ladies escorted by servants, dark-skinned Armenians, and wild-looking nomads, while everywhere camels, horses, and donkeys crowd in among the people. We have never seen so many donkeys as there are in the streets of Teheran — donkeys of all sizes and colors, donkeys so covered with brushwood for fuel that nothing but their feet is visible, donkeys so small that the bare feet of the rider dangle nearly to the ground, donkeys loaded with baskets of fruit, with huge bundles of straw several times larger than themselves, with bodies



FIG. 84. THERE ARE ALWAYS BEGGARS IN THE VILLAGES AND CITIES

of sheep from the slaughterhouse, with bricks, and with tents. We press back against the walls to let them pass, we stumble against them as we cross the street, and their loads prod us from behind as we stop to look at the articles in the shops. Story-tellers and snake charmers attract crowds which almost block the narrow passages; veiled

women, so completely enveloped in their long, dark cloaks that their own husbands would not recognize them, bargain at the jewelry booths; merchants sit cross-legged on their rugs, eating melon seeds, reading the Koran (the Mohammedan Bible), or smoking their long pipes, and all the while keeping one eye on possible customers in the crowd before them.

In Teheran most of the streets, as in other Persian cities, aside from the crowded ones in the bazaar, are dull and uninteresting, as nothing is visible on either side but mud walls. As in all Mohammedan countries, family life is very private. A Persian may welcome you cordially to his garden or to his own apartments, but no stranger or male relative sees anything of the women and girls. After a Persian girl is eight or ten years old, no man, except her father or brother and later her husband, ever sees her face. If from curiosity or from any other motive a man on the street should attempt to peer under the veil of a Persian woman, death at the hands of an angry mob would probably be the result. The life of a woman of the wandering tribes is much freer than that of her sisters in town and city. The nomad woman goes about with her face uncovered and enters into the life of the tribe as the veiled lady never does in her family.

Leaving the bazaars of Teheran, we visit next the great public square. This is an immense open park where public ceremonies are held, where the Persian soldiers drill, and where royal exhibitions take place. On one side, surrounded by a strong wall, is the most important group of buildings in Teheran—the palace of the shah, the treasury, the royal college, and the theater. In the palace we

can see the wonderful throne, inlaid and ornamented with gold and supported by carved figures of lions, on which the shahs of Persia have sat in state for centuries. The crown jewels are dazzling. There are crowns and swords and scepters blazing with glittering diamonds, gleaming sapphires, lustrous pearls, and blood-red rubies.

We leave Teheran for the south over the King's Highway, a fine, broad street which leads several miles out of



FIG. 85. WE WILL VISIT NEXT THE GREAT PUBLIC SQUARE IN TEHERAN

the city. We look back more than once at the lofty Demavend, the highest peak of the Elburz Mountains. Its towering head, now snow-white against the blue sky, now glowing with rosy light in the setting sun, and now half hidden by fleecy clouds, is a sight which visitors to Teheran never forget.

Every day the sun shines from a clear, deep-blue sky, and the air blows fresh and free across the wide plain. No wonder the nomads prefer the freedom of caravan life to living in the crowded, dirty, unhealthy towns and cities.

Our servants become our companions, and our horses seem like real friends. They follow us about like dogs, eat from our hands, and greet us in the morning with a low neigh of welcome. Days may pass, as we creep slowly toward the distant hills, without our seeing a village, a caravan, or any sign of life.

Kashan, the center of the Persian silk trade, is one of the important places on our route. In the bazaar we feast our eyes on soft, lustrous silks and velvets, pieces of lovely old embroidery, shimmering scarfs and brilliant sashes, and we long to fill our saddlebags with purchases. Shopping in Persia, however, is a work of time, several hours being used up in bargaining for a single article. So we reluctantly make our way out of the crowded bazaar to the place where our camels are resting.

We should like to swing off to the west of the caravan route and visit Ispahan, the old capital of Persia. Like all other Persian cities it is a place of mud walls and mud houses overtopped by glittering domes and minarets of numerous mosques. The city has lost much of its former life and importance, and everything looks sadly out of repair. Near by are the ruins of ancient cities and palaces; these are more interesting than the city itself, for they tell of bygone splendors and of kings and conquerors. Our trip by caravan from Teheran to the Baluchistan border will take us nearly two months. We shall grow very tired of the lukewarm water which we shall have to drink from skin bags, the dry, unappetizing food, the hot sun, the penetrating sand, and the motion of the camels; so, without stopping to visit any places which lie off our direct route, we take up our march again.

Our way lies along a stretch of desert land which scientists tell us is the bed of a dried-up inland sea. This barren region occupies a large part of central and eastern Persia and is one of the dreariest wastes to be found anywhere in the world. An old prophecy foretells that the city of Yezd, which lies on our route, will some day be buried by the sand, and the drifting dunes which to-day are piling up against the city walls seem to indicate that this prophecy may come true in the near future.

What are those curious-looking towers which, here at Yezd, seem more prominent than the minarets of the mosques? Those are wind towers, beneath which are underground rooms to which the people go on very hot days to enjoy the air which is fanned down the air shafts above. Persia is a land of great extremes of climate. The mountains on its borders shut out the modifying ocean breezes, and consequently the winters are very cold and the summers intensely hot, especially in the central and southern parts, where the thermometer often rises to considerably more than one hundred degrees. The interior of the country is so high that the air is very thin and the earth cools off quickly after sunset, so that the nights are usually not uncomfortable. After the fierce heat of the sun is gone, the people come from the stifling rooms or the underground apartments, where they have spent most of the day, and sit on the flat roofs of their houses, where they enjoy the breeze, chat, eat, and perhaps sleep.

We will stop a little while at Kerman, one of several centers in the country where the weaving of Persian rugs is an important industry. There is very little machinery in Persia; everything is done by hand and the rugs are woven

on old-fashioned hand looms. In the so-called factories of Kerman, where many of the weavers are children, a reader drones out the pattern, "Three red and two black, six blue." The little weavers chant back in their childish



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FIG. 86. WE PASS LITTLE BALUCHI VILLAGES MADE UP OF MUD HUTS COVERED WITH PALM-LEAF MATTING

voices, "Three red and two black, six blue," and so on through the long, hot hours, while their little fingers swiftly twist and knot the strands of wool.

Leaving Kerman, we journey southward, now over mountain passes, now through green valleys, and now across

long stretches of desert toward the borders of Baluchistan. We pass little Baluchi villages made up of mud huts covered with palm-leaf matting and surrounded by groves of date palms, which in many cases are the sole support of the people. The men, with their baggy trousers, long, loose blouses, and yards of cotton cloth wound as a turban over their greasy black hair, appear so repulsive that we do not care for a closer acquaintance, and the women look so worn and bent and wrinkled that they arouse our sympathy. They are not so attractive, however, that we should care to make them a visit, so we will continue our trip toward the coast.

Our trip through Persia is ended, for at Karachi, near the mouth of the Indus River, we shall take a steamer for a sail up the Persian Gulf. As we leave the desolate, barren land we wonder what will be the future of this ancient country. Both Russia and England are deeply interested in this question. Most of the commerce of the northern part is in the hands of the Russians, whose territory lies next door, and the trade of the south is controlled by the English. These two nations have made a treaty not to interfere with each other, though they are not slow in interfering with Persia when things do not go to their liking. The government of Persia therefore finds itself in a difficult position — no money in the treasury, an army of but little use, and strong nations north and south ready to interfere if things do not go smoothly. What will be the outcome no one at the present time can tell. Perhaps it would be more appropriate to close the chapter with a question mark than with a period, and watch to see what the future will bring to this land of the desert and the sunshine.

## TOPICS FOR STUDY

## I

1. History of Persia.
2. The plateau of Iran.
3. Size, surface, and climate of Persia.
4. Tabriz.
5. Route into Persia from the Central Asian Railroad.
6. Traveling in Persia.
7. Making Persian rugs.
8. A sand storm.
9. A Persian village.
10. Persian homes.
11. Teheran, the capital.
12. Persian women.
13. Kashan and its silk.
14. Ispahan, the old capital.
15. Yezd and its sand dunes.
16. Kerman and its rugs.
17. Villages of Baluchistan.
18. Future of Persia.

## II

1. On a map of Asia show the plateau of Iran and the countries which surround it. Show on it the cities mentioned.
2. Write a list of the cities situated on the plateau of Iran. Write beside each city a fact concerning it.
3. Sketch a map of Persia; on it show the route we have followed and the cities we have passed through.
4. Name a city of the United States of the same size as Tabriz; as Teheran. Name one in the same latitude as each of the Persian cities.
5. Describe two trade routes between Persia and Moscow. Write the name of a city on each route.
6. Describe the route followed by the cotton sent from Persia to Moscow; the rugs sent from Persia to Constantinople.



## III

Be able to spell and pronounce the following names. Locate each place and tell what was said of it in this and in any previous chapter.

India	Quetta
Afghanistan	Jalalabad
Baluchistan	Herat
Russia	Kabul
England	Kalat
China	Tabriz
Turkey	Ashkabad
Transcaspian Province	Meshed
Transcaucasia	Teheran
Plateau of Iran	Kashan
Persian Gulf	Ispahan
Euphrates River	Yezd
Tigris River	Karachi
Indus River	Kerman
Elburz Mountains	Kansas City
Demavend	Moscow
Marathon	Constantinople
Thermopylæ	

## CHAPTER XI

### TURKS AND ARABS

After our long, tiresome caravan trip through Persia, it is pleasant to travel for a while by water. We will choose the cool season for our voyage, as during the hot months a trip on the Persian Gulf would be nearly as uncomfortable as one on land. The English boats are fine and large, and the appearance, costumes, and manners of the passengers afford us constant entertainment.

The Persian Gulf is more than three times the size of Lake Superior. At one time it was much larger, but the northern part has been filled up by the ceaseless work of the Tigris and Euphrates rivers, which are still depositing immense quantities of silt at their mouths and building their delta farther and farther south.

We pass many islands as we sail northward. Those on our right are rugged and mountainous like the coast of Persia, near which they lie, while those near Arabia are low and sandy, like the shore line of that country. The Bahrein Islands, one of the groups near the Arabian shore, interest us more than any of the others, as they are the center of the pearl fisheries for which the Persian Gulf is famous. Pearls are found in a variety of oyster larger than the kinds which we ordinarily use for food. The pearls obtained here are large, beautiful gems, and the industry is a very important one, employing hundreds of boats and thousands of men.





See that diver just preparing to go down. Instead of being protected by a diving suit with water-tight helmet and air pump, he is almost naked. A bag to hold the shells which he may gather is fastened around his waist, and a long knife, to defend himself with if a shark comes too

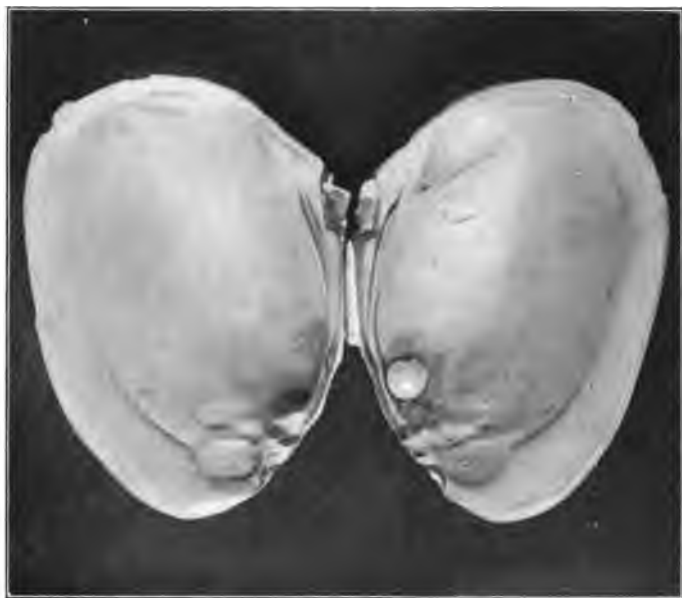


FIG. 87. PEARLS ARE FOUND IN OYSTERS

near, is carried in a sheath tied to his arm. Sharks are very plentiful in the Persian Gulf, and many divers are eaten by them every year.

A large stone attached to a rope lies in the bottom of the boat. One of the men lets it down over the side, and the diver, holding onto the rope, is carried swiftly

downward into the water by the weight of the stone. Let us watch to see him come up. How long could you hold your breath under water while you walked around looking for shells and stooping to put them into your bag? The gathering of the shells must be done with one hand, for with the other he must keep tight hold of the rope, as it is the weight of the stone which keeps him at the bottom. See, his head has just come above the surface, and our watch says just one minute later than when he disappeared. A minute is a long time to hold your breath. Try it and see, and you will realize what a wonderful thing it is for these divers to remain under water for so long a time.

The men help him into the boat, while the stone is lowered, and another diver disappears. The work is very exhausting. See how thin the bodies of the divers are, and what a queer, strained look their eyes have. We see no old men among them, for the life is so hard that few live to old age. You think, perhaps, that pearl divers must become rich from the sale of the gems which they risk their lives to obtain. On the contrary, they are miserably poor, for they receive only a few cents a day for their exhausting labor.

After leaving the Bahrein Islands, we steam northward to Bassora, a Turkish city and the place from which Sindbad the Sailor started on those remarkable voyages of which he tells in the Arabian Nights. Bassora is an open port where all the world may come to trade. The Turkish government limits navigation farther inland to one English company, and we take passage on one of its steamers for our trip up the Tigris River to the old city of Bagdad, five hundred miles away. We sail for some time between

palm-bordered banks, barren plains, swamps and marshes, and shores lined with tall rushes. Here and there are mud villages with tiny gardens of fruits and vegetables; we see



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FIG. 88. WE SEE THE REED HUTS OF THE ARABS

also the reed huts of the Arabs, with herds of camels feeding near by; and now and then we pass a group of brown tents made of sheep's hair or goat's hair, the homes of some

wandering tribe. Brown-skinned boys and girls run for long distances along the banks, begging for food which some of the passengers throw to them; flocks of sheep and goats are feeding near the river; and from time to time groups of natives stop their work in the fields to watch the steamer pass. We meet steamers carrying hides and skins, opium and gums, dates and wool, and we pass others carrying to Bagdad yarn from India, coffee from Brazil, oil from the United States, and cotton cloth from England.

Farther up the river, where cultivated fields formerly supplied food for great cities, endless flats of tall, coarse grass cover the plains, and where millions of people once lived wild animals now roam.

Far away over the barren land we see a caravan winding its way along. Accompanying the slowly moving camels are men on horseback, who dash toward the river as if to attack the steamer. On reaching the banks they stop so suddenly as to throw their horses back on their haunches, and then as suddenly they wheel and dash away across the plain. Their flowing robes, brilliant turbans, long spears, bright daggers, and splendid horsemanship are fascinating, and we watch them until they disappear in a cloud of dust.

We are in one of the oldest parts of the world. The region known as Mesopotamia, lying between the Tigris and the Euphrates rivers, is called the Cradle of the Race. Here, thousands of years ago, the great cities of Babylon and Nineveh flourished; to the north rises Mt. Ararat, where, the Bible tells us, Noah's ark first came to land; and somewhere in this region, many learned writers say, was the Garden of Eden itself, where Adam and Eve lived.



Perhaps you have read of the ancient glories of Nineveh, of the Hanging Gardens of Babylon, and of the network of irrigating canals which turned this desert region into a garden, and you are expecting to see some of these things on your trip. If so, you will be greatly disappointed. Nothing



**FIG. 89. THEIR FLOWING ROBES, THEIR LONG SPEARS, AND THEIR  
SPLENDID HORSEMANSHIP ARE FASCINATING**

remains of the ancient cities but ruins, and instead of overflowing canals watering a land green with growing crops, you will find only the empty channels choked with stones and earth, and the bare, brown fields of a thirsty country. The reopening of these old waterways and the building of new canals would make the land a most fertile one, would enable it to feed a dense population, and would make Bagdad and Bassora rank among the important seaports of the

world. A small beginning has been made toward reclaiming the once fertile fields of Mesopotamia, and some of the old canals have been reopened and repaired. The work will



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FIG. 90. NOTHING REMAINS OF THE ANCIENT CITIES BUT RUINS

advance but slowly, however, for we must remember that we are traveling in the land of the Turk, and that in the whole of the Turkish empire, from the Black Sea on the north to the desert of Arabia on the south, and from Persia

on the east to the western borders of this Mohammedan country, we shall find few modern improvements, few well-governed towns and cities, and few prosperous farmers.

In the time of the ancient glory of Mesopotamia, when Babylon and Nineveh crowned the plains, the Tigris and Euphrates rivers flowed in separate channels all the way to the Persian Gulf. Now, however, owing to the silting up of the old beds, their waters unite, a few miles from the coast, into one stream, the Shat el Arab. This shallow, muddy river is bordered for miles with groves of date palms. The plantations stretching off into the country on either side supply the greater part of the world with dates. Thousands of tons are shipped away each year, and all the inhabitants around Bassora, near the mouth of the river, pick dates, eat dates, and pack dates. The wharves of the city are piled with lumber—thin boards and strips all ready to be nailed into boxes in which to pack the fruit. From Bagdad, dates are exported in skins to Turkey, Egypt, and the East. Those shipped from Bassora are packed in boxes for the United States and European countries.

When the dates are ripe, thousands of natives flock into the plantations from the surrounding country. The men climb the trees and cut and shake off the fruit while the women sort and pack it. The weather is unbearably hot at this time of the year. The wind which has blown all summer and afforded some little relief from the awful heat ceases in the early fall. Few foreigners can endure the scorching heat of the sun in the still air, but the natives work on, for the money which comes from the sale of the dates is their chief means of livelihood. A few pounds of dates seems a large quantity when you think of eating them

all, yet thousands of tons are shipped each year from this Turkish city of Bassora, the name of which perhaps you never heard before reading this chapter. It brings the far-away parts of the earth nearer, does it not, to think of the numberless places (on rivers, gulfs, bays, and oceans, on high plateaus and in low valleys, in Arctic plains and tropical jungles) where important industries which add to our comfort and happiness are carried on by people of every race and color.

Bagdad, the principal port of Turkey in Eastern waters, is the very city in which the charming Scheherazade told her cruel husband those wonderful stories which fascinate girls and boys to-day as much as they did the sultan. As we near the city we recall some of these stories of the Arabian Nights, and their fascinating descriptions of enchanted palaces, beautiful maidens, treasures of jewels and gems, genii and giants, and we should not be surprised to see the caliph Harun-al-Rashid himself, decked in his royal robes, waiting to receive us, or to find him wandering in his disguise about the narrow streets as he was wont to do.

For some distance below Bagdad the river flows in a straight line. This gives us the opportunity of viewing the city as we approach it. Above the houses rise hundreds of stately date palms; they line the streets, ornament the gardens, and surround the wells. Higher against the blue sky are the tall, slender minarets and the big round cupolas of the mosques, brilliant in blue, black, white, and green. In Christian countries spires and steeples are often topped with a cross, but in Mohammedan lands every cupola and minaret is surmounted by a glittering crescent.

Since we began our journeying in Eastern countries we have become so accustomed to crowds and to strange mixtures of peoples that we easily make our way through the horde of Turks, Arabs, Persians, Armenians, Syrians, Africans, Hindus, and Bedouins who throng the landing place.



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FIG. 91. THE GOOFFA IS A VERY COMMON BOAT ON THE TIGRIS RIVER

Anywhere in the Orient a crowd of people is a kaleidoscope of color, and that gathered at the wharf in Bagdad is no exception.

See those men sitting in that immense round dish out on the river! We rub our eyes and wonder if this is the land of Mother Goose and if those are the wise men of Gotham

who went to sea in a bowl. That is not a bowl, but a gooffa, a very common boat on the Tigris here at Bagdad. It is an immense circular basket six or eight feet in diameter, made of wickerwork and thickly tarred inside and out to make it perfectly water-tight.

The gooffa is not the only queer-looking craft on the river. See those rafts made of poles supported by inflated goatskins and covered with the boughs of trees. They have come from many miles up the river and are loaded with merchandise brought by caravans from the shores of the Mediterranean Sea, and with wood for building purposes.

The streets of Bagdad, like those of other Eastern cities, are narrow, crowded, and bordered with mud walls, above which we catch glimpses of waving date palms and orange and pomegranate trees. We know that, hidden from view behind the walls, thousands of men, women, and children are living, working, and playing, and we wish that Mohammedans were not so particular about the privacy of their lives, so that we might see some of their homes.

What is that loud cry which seems to come from the air above us? That is the muezzin far up in the minaret, calling the faithful to prayer. We should become accustomed to this call if we lived in a Mohammedan country. Five times a day the muezzin cries from his tower in a loud, chanting voice, "Allah is greatest! Allah is greatest! Only Allah, besides Him there is not Allah, and Mohammed is the apostle of Allah!" When this call is given, every faithful Mohammedan, wherever he may be or whatever he may be doing, drops on his knees facing the holy city of Mekka and recites his prayers.

As we walk about through different parts of the city we wonder how the people know when they reach their own homes, as the streets all look very much alike, the houses are hidden behind mud walls, and at night the city is in



FIG. 92. WE HEAR THE MUEZZIN FAR UP IN THE MINARET CALLING THE FAITHFUL TO PRAYER

darkness except for the moon and stars. No stranger rests well in Bagdad, for the dogs, which are fully as numerous as in other Eastern cities, keep up a continual barking and howling which makes sleep out of the question for those not accustomed to the noise.

The few short railroads in Asiatic Turkey are in the western part near the Mediterranean Sea, and the trade in other parts of the country is by caravan. The ruler of Turkey has, however, given permission to the Germans to build a railroad from the Asiatic shore opposite Constantinople to Bagdad. By looking at the map you can see what a convenient land route between Europe and Asia this will be, and you can see also that such a railroad will be a great rival of the steamer route, so important to England, through the Red Sea. England naturally has done everything in her power to prevent such a railroad from being built, and owing partly to that and partly to financial reasons, the line has not yet been completed. In a few years, however, it may be extended to Bagdad, and doubtless some day connections will be made across southern Persia to the Indian frontier and thence to Calcutta. We might compare this southern route through Asia to our Southern Pacific Railroad, the Trans-Siberian to our Northern Pacific Line, and the Central Asian Railroad in the Russian possessions to the Union Pacific Railroad.

Outside the walls of Bagdad, in the part of the city on the western shore of the river, there is a large inclosure filled with hundreds of camels, horses, and mules, where we can obtain animals for our trip. We will hire several camels and their drivers, and, as travel in parts of Turkey is not safe, we will join some larger caravan. The wandering tribes of Bedouins often rob caravans and dash off so quickly into the desert, which they know as well as you know the streets of your city, that it is useless to follow them.

We have an exciting time mounting our camels. They are not ugly, though they groan fearfully as the drivers



bid them kneel for us to mount. Look out that you are not thrown off as the camel rises. He comes up on his hind feet first, as we learn when we are pitched violently forward. Then he rises on his front feet and we lurch suddenly backward. The gait is unpleasant to anyone not used to it, and we swing back and forth like a boat rocking on the waves. We will take along with us some extra horses, which we can ride if the motion of the camel makes any of us seasick.

We are going to what is perhaps the oldest city in the world, Damascus, nearly due west of Bagdad. In order to avoid the worst part of the desert between the two cities, we will take a route which curves around the north of Arabia. We shall pass but few towns on our way, and we must lay in a stock of provisions for our journey, as caravan camels travel slowly. There is as much difference in the speed of camels as there is in that of horses. Some camels can make as much as a hundred miles a day, while these which make up our caravan will not travel more than thirty. The mail is carried from Bagdad to Damascus on a swift camel which makes the trip in ten days, while we shall be more than a month. Let us occupy some of this time by learning something of the country through which we are traveling.

The part of the Turkish empire which is in Asia is many times as large as European Turkey. To the north, bordering on the Black Sea, Transcaucasia, and Persia, is the province of Armenia. Perhaps you may have seen some Armenians, for, because of their treatment by the Turks, many have left their homes for Europe or the United States. The Armenians are Christians and the Turks are

Mohammedans, many of whom think that, if they cannot convert a Christian to Mohammedanism, the next best thing is to kill him. So the Armenians have been robbed and murdered, their houses burned, their villages destroyed, and their wives and children killed by the cruel Turks. The



FIG. 93. SOME CAMELS CAN MAKE AS MUCH AS A HUNDRED MILES A DAY

men of Armenia are peaceable and do not like to fight; they are industrious and thrifty, and, as they can easily outstrip the lazy Turk, much of the trade of Turkish cities is in their hands.

To the west of Armenia is the state of Angora. Here we can see, feeding in the pastures, great flocks of Angora goats, whose warm coats are used in making carpets and

mohair cloth. Angora goats are raised to-day in many parts of the world, but, owing to the dry climate and the clear, bracing air of these upland pastures of Turkey, the fleece of the animals raised there is superior to that of any others. Hundreds of tons of wool come from Angora to the ports on the Mediterranean Sea and from there are shipped to Constantinople, to be scattered through different parts of Europe and the United States.

Angora is one of several states which make up Asia Minor, the peninsula which extends westward between the Black and Mediterranean seas. Smyrna is the principal city and the chief seaport of Asia Minor, and we should find a visit there very interesting. It is the most up-to-date city of Asiatic Turkey and has a large trade. Business firms from the United States are introducing through this port sewing machines, typewriters, office supplies, boots and shoes, furniture, and other modern manufactures.

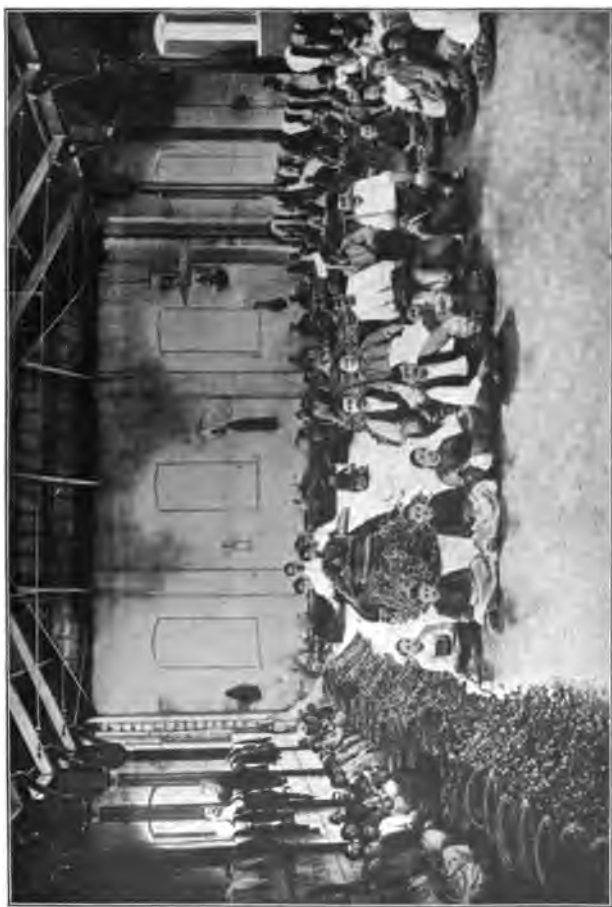
Since ancient times it has been the custom in Asia Minor, and is to-day in many parts of the country, to collect snow from the mountains during the winter months and store it in deep pits in cities and towns. During the hot summer this snow is peddled from house to house. An American firm has now introduced an ice plant into Smyrna, which will probably be the first of many to be established throughout the country.

Smyrna is a great market for oriental rugs. Some are made in the city itself, but many more are woven in the tents of wandering tribes and in the little mud villages scattered over the plains and on the hillsides. The rugs are brought into Smyrna by caravans, some of which have been several months on their journey.

There are two products which girls and boys like to eat for which Smyrna is an important market. These are figs and licorice. On the wharf there are piles of great brown bales filled with licorice root, which is obtained from a plant three or four feet high belonging to the pea family. Formerly, and to some extent at the present time, the roots were obtained from plants which grew wild in the fields, but to-day there is such a demand for the drug that large areas are planted each year. The roots are dried and then pressed into bales to be shipped away. Did you realize how much licorice we use in the United States as a medicine, to improve the taste of other unpleasant medicines, to coat pills, to add to the flavor of beer, and to eat in candy? It takes many thousand tons to supply these and other needs, and the most of this enormous quantity is shipped from Smyrna.

Smyrna figs are considered the best in the world. The fig orchards in this part of Turkey are so numerous and so well cared for that it would take more than one hundred thousand camels, each loaded with four or five hundred pounds, to carry the fruit produced in one year. The figs ripen early in August and soon fall to the ground. You can imagine how busy the people are at this time of the year, packing the fruit in jars and boxes of all shapes and sizes, to be sent to European countries, the United States, and other lands. We import millions of pounds of figs from Smyrna, and we use also millions of pounds which come from our California orchards.

One writer has compared Damascus to a pearl set in emeralds, and as we first view the city from our camels we do not wonder at the description. The mud houses are of light clay color, and terraces of these delicate creamy roofs



**FIG. 94. WE IMPORT MILLIONS OF POUNDS OF FIGS FROM SMYRNA**

rise out of a sea of dense green foliage which for miles surrounds the city. No wonder that, to travelers coming from the desert, where for days at a time no tree is visible, the first sight of Damascus in its setting of green should seem beautiful. To people accustomed to wooded hills, shaded streets, and fragrant orchards it probably would not make so great or so pleasing an impression, and a closer view of its mud walls and houses dispels any resemblance to a pearl.

Damascus is one of the most important cities of Turkey, and its population is estimated at from two hundred fifty thousand to five hundred thousand. Let us visit the bazaars, for they are the most famous in the East. From the crowd, the noise, the dust, and the confusion we should think that all the inhabitants of the city were there. It seems almost impossible to believe that for four thousand years traders have been buying and selling in the streets of Damascus. When the pilgrims landed on the bleak shores of Massachusetts, the noisy crowds were thronging the alleys; when Columbus discovered America, Jews, Mohammedans, and Christians were bargaining in the little stalls; when Christ was born, the veiled women, the turbaned men, and the donkeys, loaded with goatskins of water, with piles of firewood, and with bundles of rich rugs, jostled and pushed their way through the narrow streets; and could a picture have been taken in the time of Abraham, David, or Solomon, it would look very much like a snapshot which any tourist may take to-day. The goldsmiths are at work on the same dainty filigree work, the coppersmiths still hammer out dishes of the same shape, the rug merchants still sit cross-legged near their wares, and the letter writer, with his inkhorn in his girdle,

still waits for customers, just as goldsmiths, coppersmiths, rug merchants, and letter writers have done for centuries.



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FIG. 95. THE LETTER WRITER STILL WAITS FOR CUSTOMERS

The "street which is called Straight," of which we read in the Bible, is still the most important thoroughfare in Damascus. It is somewhat wider and straighter than some of the others and is lined for a part of the way by the best shops which can be found in the city.

What is the crowd which completely fills that great square in the heart of the city? If we were at home, we might think that a circus had come to town. The square is crowded with groaning camels, heavily laden donkeys, horses, and mules. Crowds of people are mounting their steeds, saying farewell to friends, and making their last preparations for a long journey. These are pilgrims southward bound to Mekka. This city, supposed to be the birth-place of Mohammed, is situated at the southern end of the long, narrow strip of Turkish territory which extends along the eastern coast of the Red Sea. Mekka is the holiest of all places in the world to the followers of the prophet, and any Mohammedan who makes a pilgrimage to the city thinks himself sure of salvation.

From Damascus to Mekka by caravan is a long, hard trip of nearly six weeks. Many of the wealthy Mohammedans now go an easier way by rail to Beirut, and thence down the Red Sea to a port near the Holy City. But the harder the journey the greater the blessing, and thousands go every year by slow caravans from Damascus. No one but Mohammedans are allowed to make the pilgrimage, and none but Mohammedans can enter Mekka, so we will not join the pilgrims but will journey by ourselves down this narrow strip of Turkey known as Syria, to the mouth of the Red Sea.

If our trip through Turkey were completed, we could start from Damascus on a queer little cogwheel railroad and wind over mountains, through passes and gorges and little green valleys, to Beirut, ninety miles away on the seacoast. Beirut is perhaps the most prosperous city in Syria, and certainly one of the most beautiful. The blue



Mediterranean lies at its feet, and behind it rise lofty, snow-capped mountains. On the plains near the shore there are large vineyards and orchards of olives, figs, lemons, and oranges. Even the steep mountain slopes are cultivated, and stone terraces prevent the soil from being washed into the valley. Some of the fruit trees grow to a great age, and many of the orchards which clothe the mountain sides have been tended by the same families for hundreds of years.

The railroad from Damascus to Beirut follows the old highway, and from the car windows one can catch glimpses of long caravans plodding slowly along the dusty road. The donkeys and camels



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FIG. 96. HERE AND THERE ONE CAN SEE  
PEASANTS AT WORK

are probably loaded with grain from the little farms, silk from the looms of Damascus, poles from the poplar trees (which, being rapid growers, are planted everywhere in Syria), fruit (which grows abundantly all over the country), and cans of petroleum from Transcaucasia.

Here and there one can also see peasants at work in the fields or busily engaged in cutting the leaves from the cactus hedges to use for fuel. Wood is very scarce in

Syria, and branches, leaves, trunks, and roots of trees, plants, and vegetables are carefully saved and dried.

We do not wish to leave Turkey at Beirut, however, for by so doing we should miss one of the pleasantest parts of our journey, the trip through the Holy Land, where Jesus lived and worked. Jerusalem is rather more than one hundred miles from Damascus, and our route lies near the shore of the Sea of Galilee and along the Jordan River. Because of its connection with the life of Christ the Jordan is familiar to everyone, though its entire length is but little more than the distance from Boston to New York.

You have all heard of the Dead Sea, into which the Jordan River flows. It was once a much larger body of water than it is to-day and occupied the entire valley where the river and the Sea of Galilee now lie. It is the lowest body of water on the earth. If you could lie in the waters of the Atlantic Ocean on a level with the surface of the Dead Sea, you would have more than thirteen hundred feet of water above you.

You would be in no danger of drowning in the Dead Sea, as it is eight times as salt as the ocean, and in such water it is impossible to sink. When you finish your bath you will be glad to wash in some clean, fresh water, for your whole body feels sticky and you can even rub off the grains of salt with your hands. No fish live in this sea, no birds come here to drink, and nothing grows on its barren shores.

If it were not for its associations with the life of Christ, no foreigner would think of making a tour to Jerusalem. It is an unimportant place of about twenty thousand people and is of little interest commercially or industrially. Its

low mud houses are uninviting, its streets are narrow and dirty, its bazaars are filled with cheap, unattractive goods, and its beggars and dogs are repulsive; yet it is visited



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**FIG. 97. THE STREETS OF JERUSALEM ARE NARROW AND DIRTY**

annually by thousands of people from all over the civilized world. There is probably no city so small which receives so many visitors. The center of interest is the Church of the Holy Sepulcher, built over the spot where the body of Christ is supposed to be buried. Thousands of pilgrims

throng the street which is believed to be the one through which Jesus was led to Calvary to be crucified. The modern city, however, is built on the ruins of others which have stood on the same site, and if the Via Dolorosa is really the street through which the people followed Christ to Calvary, they must have walked thirty or forty feet below its present level.



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FIG. 98. THIS STREET IS BELIEVED TO BE THE ONE THROUGH WHICH JESUS WAS LED TO CALVARY

We can ride in less than an hour to the little town of Bethlehem, where Jesus was born. A church has been built on the spot where the manger is supposed to have stood, and thousands of pilgrims, with love and worship in their eyes, and as many tourists with notebooks and

cameras in their hands, stand every year before the altar which marks the place where the Saviour was born.

Bethlehem is to-day a neat little whitewashed town of eight thousand people, nearly all of whom depend for a living on the visitors to the place. As we walk through the narrow streets we can see the people in their little low houses making rosaries, crucifixes, boxes, paper-cutters, and other small articles from olivewood, sandalwood, and



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**FIG. 99. THE WELL AT NAZARETH MAY BE THE VERY ONE WHERE MARY, THE MOTHER OF JESUS, USED TO COME TO FILL HER WATER JARS**

mother-of-pearl. Fully half of the inhabitants of Bethlehem spend their time in doing such work, and immense quantities of these and other curios are sold annually to tourists (nearly all of whom wish to take home some souvenirs from the Holy Land) and shipped to other countries.

Nestling among the hills to the north of Jerusalem is the little town of Nazareth, where Jesus lived and worked with his father Joseph. The mud houses so common in



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FIG. 100. WE PASS ENCAMPMENTS OF BEDOUINS

the East do not last very long, and none of the buildings now standing in the town were here in the time of Christ. The well which supplies the village with water is very old and may perhaps be the very one where Mary, the

mother of Jesus, and other women of the village used to come morning and evening to fill their water jars.

The threshing floor still lies at the end of the village. The grain is still trodden out, as it has been for centuries, by camels and donkeys, and the men separate the wheat from the chaff, as they did in olden times, by throwing it into the air and letting the wind do their work for them. In the brown fields the women still glean the scattering spears which the reapers have left, as Ruth did in the fields of Boaz. The hills around Nazareth are still clothed with orchards of figs and olives, as they were when Jesus walked among them. In the surrounding country the wandering tribes still live in tents, raise their flocks and herds, and journey over the desert to find fresh pasture lands, as did Abraham and other patriarchs of the Old Testament.

Leaving the Holy Land, we travel southward for days under the fierce heat of the desert sun. We pass mud villages of miserable Turks and encampments of Bedouins. The drinking water, which we carry in goatskins, is lukewarm, the hard bread and dates do not satisfy our hunger, and we are in constant danger of attack by the wild tribes of the region and of losing our horses and camels if not our lives. So the trip southward is not a very pleasant one, and we are glad when the minarets of the Holy City of Mekka come into view.

If half of what Moslem writers say in praise of Mekka were true, then we should have to believe that it is of all cities in the world the most beautiful. This is far from the truth. It is situated in a hot, sandy valley destitute of trees and shrubs and surrounded by barren hills. The streets

of the city are deep with dirt and dust in the dry season and with mud in the rainy months. The sacred mosque, the prayer center of the whole Mohammedan world, stands in the lowest, hottest part of the valley. Around it, on the slopes of the surrounding hills, houses of dark stone rise tier upon tier. The mosque is circular in shape and surrounds the Caaba, a cloth-covered, cubical structure which contains a large black stone, the holiest object on earth to a Mohammedan. Any Moslem will tell you that this stone fell snow-white from heaven and landed where it now lies, exactly under the throne of God, and that during the long ages which have since passed, it has gradually turned black because of the sin which it has absorbed from the kisses of millions of pilgrims. We shall find it hard to believe the whole story, but one part of it at least is probably true: scientists tell us that the rock is a meteorite, which fell from the skies, though whether it was white at the time and has since turned black, you may believe or not as you please.

You have all heard of Mocha coffee, and you will find on your maps the town of Mocha, near the southern entrance of the Red Sea. Doubtless you think, as many people do, that it is a large, important port from which great quantities of Mocha coffee are shipped. The place to-day consists of little more than a lighthouse on the sea, and a crumbling heap of ruins. Little coffee comes from this part of Asia, though some is raised in the fertile province of Yemen in southern Arabia, and is shipped largely from Aden.

Aden is the most important place on the eastern shore of the Red Sea. It is a British colony, and on account of its position it controls the southern entrance of this waterway



and is a coaling station for vessels on the long voyage from European waters to India, China, and Japan. It is also a commercial center for Arabian products, as it is near the most fertile section of the country. Such an important place is of course strongly fortified. Everything in its



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FIG. 101. WATER STRETCHES BEFORE ADEN, AND BEHIND IT IS A  
BARREN MOUNTAIN RANGE

defenses is of the most modern type, and it would be about as hard for a nation at war with England to capture it and to open the way into the Red Sea as to take Gibraltar and unlock the door of the Mediterranean.

How a British soldier must hate to be stationed at Aden! He is shut up in an intensely hot region where his only companions are soldiers as miserable as he is.

Water stretches in front of him, and behind him is a high, barren mountain range. Much of his food is supplied by steamers, and his drinking water is distilled from the sea by government condensers. He may not see a drop of rain during his entire stay. When showers do come, the streams rush down from the mountains and fill huge tanks built centuries ago to hold the precious water. This is carried around the town in skins and sold to the natives. There are no shady trees, no attractive gardens, not even a patch of green grass in sight; everything is gray or brown like the rocks and soil.

One writer says that Arabia, like its inhabitants, has a rough, frowning exterior and a warm, hospitable heart. It is a country about four times the size of France, and though much of it is at present a dreary, barren desert, nearly two thirds of its area consists of fertile soil which, with irrigation, might be made to produce fine crops. The interior is a table-land with many fertile sections, but between this region and the coast stretches a desert area, surrounded in its turn by mountain ranges.

The southwestern part of Arabia, to which Aden is the door, is the most fertile part of the country. In the valleys of this section we find many fruits—oranges, lemons, plums, pomegranates, figs, and dates. There are fields of different kinds of grain—wheat, barley, corn, and millet—and acres of coffee plants. The wealth of an Arab is estimated by his groves of date palms or by the size of his flocks and herds, so we are not surprised to see on the wharves at Aden, besides the bags of coffee and the gums and resins which the plants of the desert produce abundantly, large quantities of dates, hides, and skins.

We should not enjoy a trip through Arabia. There are no railroads and no rivers in the country. We should have to travel over a succession of stony deserts and oases shaded by date palms and past mud villages and encampments of tents. There would be days when we should see no sign of life, for Arabia is very thinly inhabited. We do not know its exact population, but it probably averages less than one person to a square mile. Maskat is the most important port on the eastern coast, as Aden is on the west.

As we approach Maskat from the water it appears as unattractive as Aden did. The land looms up in a mass of dark, rugged mountains; the town nestles white at their feet; and the rocks above are crowned with castles and towers. Above all, the scorching sun shines down on dirty streets, crumbling walls, and stifling houses. The bare rocks reflect the heat, and the hills shut off the breezes, so that Maskat is one of the hottest places on earth. The most important export is dates, and in the country around, the date-mat huts of the Arabs are as common as the black tents of the Bedouins in the interior. Most of the imports are from India and consist largely of rice, which is the principal food of the people, and the cotton cloth for their garments.

One of the many books about Turkey and Arabia is called "Topsy Turvy Land." Perhaps in your trip through these countries you have noticed some of the customs of the people and found some of the reasons for this title. When going into a house, people take off their shoes but keep on their hats; women usually go barefoot but cover their faces; the people use their bread for plates, and before the meal is finished they eat them; they sit on

the floor of their houses and sleep on the roof ; the Red Sea is blue and the Persian Gulf is an English lake ; travelers greet us by saying " Peace be to you," and then proceed to destroy our peace by robbing us of our animals or supplies. It is indeed a topsy-turvy land, but what do you suppose a Turk or an Arab would say of some of the things he would see if he were making a trip through the United States ?

### TOPICS FOR STUDY

#### I

1. The Persian Gulf.
2. Pearl fisheries.
3. Mesopotamia and its ancient glory.
4. The world's date supply.
5. The Tigris River and the city of Bagdad.
6. Divisions of Turkey in Asia.
7. The city of Smyrna.
8. Figs and licorice.
9. The ancient city of Damascus.
10. A pilgrimage to Mekka.
11. A trip through the Holy Land.
12. Mocha and Aden.
13. Arabia and Maskat.

#### II

1. Make a map of the Persian Gulf and the surrounding land. Mark the course we have taken on our trip and the places at which we have stopped.

2. Find in cyclopedias and other sources all you can about pearl oysters. Where else besides in the Persian Gulf are they found ?

3. Sketch a map of Turkey and Arabia. Trace the route we have followed in our journey, and write the name of each city at which we have stopped.

4. Fill in the blanks in the following sentences:

- a. Mesopotamia lies in the valley of the \_\_\_\_\_ and \_\_\_\_\_ rivers. Two of its ancient cities were \_\_\_\_\_ and \_\_\_\_\_.
- b. Dates are shipped in great quantities from \_\_\_\_\_ and \_\_\_\_\_.
- c. Bagdad makes us think of \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.
- d. Smyrna is an important \_\_\_\_\_; it exports \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.

5. What does the cyclopedia tell you about the Dead Sea?

6. Name the waters on which you would sail in going from Aden to London. What might be the cargoes carried each way?

### III

Be able to spell and pronounce the following names. Locate each place and tell what was said of it in this and in any previous chapter.

Persia	Black Sea	Jerusalem
Transcaucasia	Adriatic Sea	Bethlehem
India	Dead Sea	Nazareth
Brazil	Sea of Galilee	Mekka
England	Tigris River	Mocha
Asia Minor	Euphrates River	Aden
Syria	Jordan River	Maskat
Mesopotamia	Shat el Arab River	Bassora
Yemen	Mount Ararat	Bagdad
Angora	Bahrein Islands	Nineveh
Armenia	Strait of Gibraltar	Teheran
Holy Land	Smyrna	Babylon
Persian Gulf	Damascus	Calcutta
Red Sea	Beirut	Constantinople

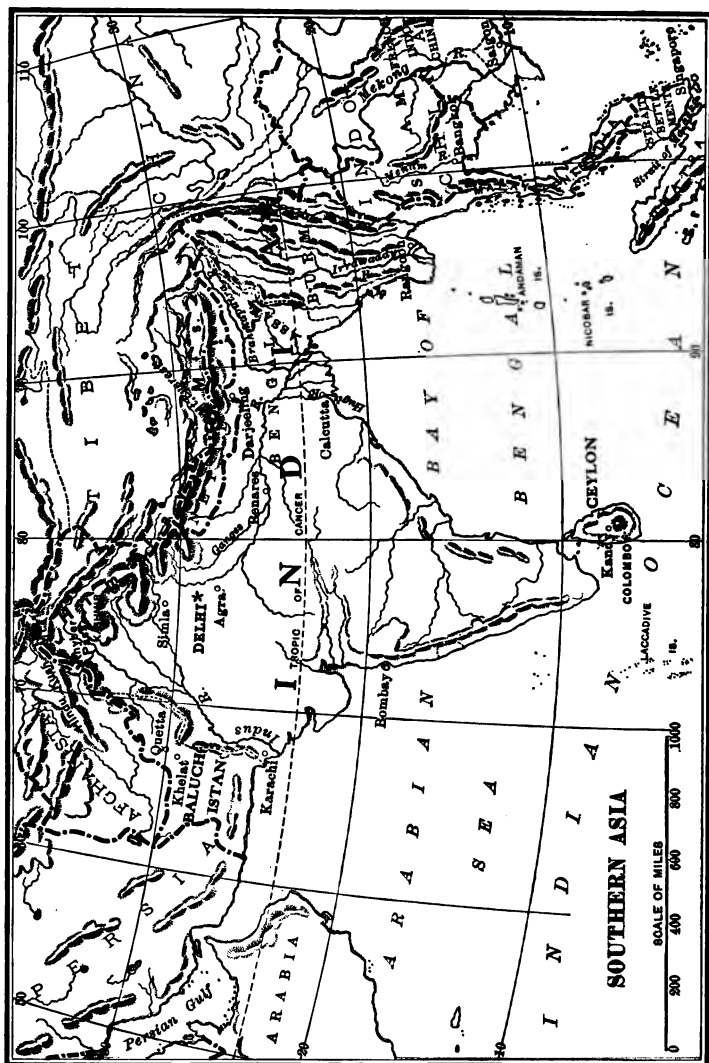
## CHAPTER XII

### INDIA — THE LAND AND THE PEOPLE

Rudyard Kipling, the author, who was born in India and who lived there for many years, has described the life in that country better, perhaps, than any other writer. He says in one of his poems,

Oh, East is East, and West is West, and never the twain shall meet,  
and it is true that people of the Western world and these strange thinkers of the East can never fully understand each other.

We have visited many strange lands and have seen many strange peoples, but we shall find in our trip to India scenes fully as strange and people fully as queer as any we have seen elsewhere. Of all the Asiatic nations the people of India are perhaps the hardest to understand. A Hindu is so polite, so anxious to please, that he often says what he thinks one likes to hear instead of what is strictly true. So it is very difficult for foreigners to find out just what Hindus really think about things. They are a strange contradiction. They would not hurt or illtreat an animal, but they would allow a countryman of a different caste, or class, from themselves to die before they would touch him. They are very careful to perform all their religious duties regularly, to worship, to bathe, to make offerings to their gods, yet they arrange a daughter's marriage while







she is a mere child, and then, if the boy husband dies, they neglect and abuse the little widow for the rest of her life.

The people of India are not naturally cruel, but they are led to do these and other strange things by their religion and customs. In no other country of the world, perhaps, does religion enter so largely into the daily life of the people, for they bathe, eat, work, marry, and worship in accordance with their religious teachings. We differ from them in many ways, but we cannot help respecting them in their effort to do what seems to them right.

India is more than half as large as the United States. The distance from its extreme northern boundary to its southern point is greater than from the northern part of Maine to the mouth of the Mississippi River. The difference in climate between northern



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FIG. 102. OF ALL ASIATIC NATIONS THE PEOPLE OF INDIA ARE THE HARDEST TO UNDERSTAND

and southern India is much greater than between New England and the states bordering on the Gulf of Mexico. In the north are the snow-clad peaks of the Himalayas, and in the south are the burning lands of continual summer.

The different parts of the country vary as much in surface as they do in climate. Near the coasts there are low plains covered with dense jungles, which receive a heavier rainfall than any other place in the world. In the interior there are high, dry plateaus with almost no rainfall and where irrigation is necessary for the production of crops.

Down from the mountains in the north flow several large rivers — the mighty Brahmaputra, the sacred Ganges, and the swift Indus. These are the great highways, the great fertilizers, and the great irrigators of India. Every year they bring from the mountains thousands of tons of silt, which they drop on their low flood plains or deposit at their mouths. When the snows melt on the mountains and the tropical rains come, these mighty rivers swell to torrents and overflow their banks, flooding hundreds of square miles and often doing great injury to towns and villages, fields and crops. In some sections a network of canals fed by such rivers supplies the means of irrigation, furnishing water in the dry season for the growing crops and serving also in some districts as highways.

Great Britain controls this great nation, and the king appoints a viceroy to rule India. He is one of the most important officials in the United Kingdom, and he needs to be very brave, tactful, just, and honest in order to rule successfully these millions of people of widely differing races, whose customs and ideals are so unlike those of the British.

India is divided into several large provinces, at the head of each of which is a governor or a lieutenant governor. Besides these larger divisions there are several smaller states, in which the native rulers—the rajahs, the maharajas, and lesser officials—have been allowed to retain their positions under the oversight of a British resident, who rarely interferes so long as they are loyal.

There are probably less than a hundred thousand British in India, ruling over its three hundred million people; yet the government is so well organized and so wisely administered that life and property in most parts of the country are as safe to-day as they are in England.

Railways have been extended, great irrigation systems constructed, roads built, exports and imports increased, and the country and the people benefited in many ways. We can go by train to most of the large cities, and although the cars are not so luxurious as those to which we are accustomed, they are better than slow, lumbering oxcarts. In India, where the wages of the majority of workers vary from four or five to twenty cents a day, the mass of the people are not used



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FIG. 103. THE CITIES OF INDIA ARE CROWDED WITH NATIVES

to luxuries, and it would be foolish to provide plush-covered seats for men and women accustomed to squat on the mud floor of a hut. Each traveler takes with him his mattress, blankets, cooking utensils, and anything else he may need on



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FIG. 104. TO SEE REAL INDIAN LIFE WE MUST  
VISIT ONE OF THE VILLAGES

a long journey, and, in the case of the wealthy, a servant to care for them. The poor classes get along with less luggage, for the Hindu can go to sleep anywhere and on anything. He wraps himself in the folds of his long robe and curls down in the sunshine; undisturbed by the noise or the crowds, or by the hard ground or board on which he is lying, he is soon fast asleep.

In the large cities there are such swarms of natives that we wonder if there are any left to fill the country places. Crowded though the cities are, comparatively few of the people live in them. Nine tenths of the population of India

are farmers and live in villages near their little farms. Some of the provinces are among the most densely populated areas of the world. Bengal, the province on the eastern coast of India in which Calcutta is situated, has an average population of nearly six hundred to a square mile.

To see the real Indian life, therefore, we must visit one of the thousands of villages scattered through the country. Most of them lie off from the main highways, and the majority of the inhabitants have never been more than a few miles from home. An Indian village is really a little world in itself. Many of the articles necessary in their simple lives are made by the villagers, and their little farms supply their food. Their clothing causes them but little thought. Rudyard Kipling says,

The uniform 'e wore  
Was nothing much before,  
And rather less than 'arf of that be'ind.

Some of them make a more elaborate costume by twisting some yards of muslin around the waist and another piece over the shoulder. The dress of the women is similar, only more yards of cloth are used. In the cities we may see a few men who have adopted our style of dress, but all the farming population and the laborers dress in native fashion, and everywhere in the villages we shall see draped bodies and bare brown feet and legs.

There are villages in the open fields and the jungles, on mountain slopes and high plateaus, by rushing streams and in arid plains; but although the situation may differ, the villages themselves are all much alike. Here is one sheltered by coconut and mango trees, which we will choose

for our visit. Hear the monkeys chattering in the branches! There are a great many of them, and they are very tame because the people never frighten or injure them, monkeys as well as some other animals being connected with their religion. The queer little houses are made of sun-dried bricks and clay and are covered with a thatch of palm leaves. All the dwellings are small, but they vary from a little one-room hut to a collection of several buildings surrounded by mud walls. Except among the poor people the women's part of the house is separate from that used by the men. You must remember that many of the people of India are Mohammedans, and in a Mohammedan family the women are seldom seen in public. Many of the Hindus have adopted this custom of keeping the women secluded, and most of those whom we shall see working in the fields and in the streets with the men are of the poorer classes. There is little furniture in the houses; the great mass of people in India need but little, as they sit, eat, and sleep on the floor. In the houses of the well-to-do you would find chairs, stools, or swinging benches, but many of the poorer people would be as uncomfortable sitting in chairs as you would be on the floor. Do you see those mats and pillows rolled up in a bundle in a corner of the room? Those are the beds. At night they are unrolled and spread out on the floor. In some of the houses you may see a small cot, but most of the family use the floor for a sleeping place.

In the poorer houses the kitchen is often out of doors. In the northern part of the country the people cook and eat in the house during the winter, but in the southern sections the climate is so warm that they live out of doors the year round. The provisions, such as millet, wheat, rice,

curry, and vegetables, are kept in earthen pots around the sides of the room or in a storehouse built for the purpose.

Near the houses are small gardens where cucumbers, peas, greens, onions, and beans are raised. The pastures and large fields are away from the village, and the people often go several miles to their work. They never think of living, as farmers in our country do, in lonely houses on their farms. A man may camp in his fields during the busy season, and when the crops are ripe, some member of the family often stays in a rude shelter which has been built in the fields, and guards the precious crops against thieves.

Let us take a walk through the village. Near the center is the temple where the people worship, and in front of it is a large, shallow tank of water in which the people bathe. Frequent bathing is a part of the religion of the Hindus, and they attend to it as regularly as we do to washing our faces and hands.

People rise very early in the morning in India, as their hardest work must be done before the sun gets too hot. The men and boys go immediately to bathe, while the women sweep the house and drive away ill luck for the day by spreading manure mixed with mud over the yards and courts. Then they go to wash and to get fresh water for the house. See how straight they are and how gracefully they walk with the heavy water jars on their heads.

It does not take long to prepare the rice or the wheat cakes for breakfast and to get the buttermilk and some kind of spiced hot vegetable or hot sauce. The men eat first and then the women and girls. How should you like to use the floor for a table, plantain leaves for plates, and fingers for knives and forks? The boys come home from school to eat

with the men. School before breakfast, you exclaim! Yes, indeed, school begins at six o'clock in the morning and continues most of the day. The boys come home for breakfast between eight and nine and for dinner between one and two. The girls, as a rule, do not attend school, and comparatively few of the boys, considering the millions of people who live in India.

After the men and perhaps some of the women have gone to their work in the fields, the women who are left at home get the vegetables ready for dinner, pound the unhusked rice with a wooden mallet, grind the millet between two large stones to make flour, and prepare the curry to make the hot sauce of which the people are so fond.

If you had no watch or clock to look at, you would hardly know when to go to dinner, but the Hindus tell time very readily by the sun. They know by its height when it is mealtime and when to take the sheep and cattle out of the folds and drive them to pasture. Their rising bell is the morning star, and by its light they feed the cattle, bathe, go to the temple for worship and to the well to draw water for cooking and for irrigating the thirsty fields.

Parts of India are very dry, though in the rainy season there is plenty of water which runs to waste. The melting snows of the Himalaya Mountains supply an abundance in the north, while the Ganges and Indus rivers, with their many branches, carry immense quantities to eastern and western parts of the country. In the central and southern portions the farmers collect the surplus rainfall in reservoirs.

Let us stop for a moment and watch the men irrigating their fields. The wells of India are sometimes ten or fifteen



feet in diameter, and the mouth is usually built about with a stone wall. A tall pole with a groove in the top stands at the edge of the well. In this groove runs a bamboo rope or pole, to one end of which is fastened a huge skin bag capable of holding several gallons; to the other end a pair



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FIG. 105. AS THE BULLOCKS WALK AWAY THE DRIPPING BAG  
SLOWLY RISES

of bullocks are fastened. Now they are backed up close to the well, and the bag is down in the water. As the bullocks walk away the dripping bag slowly rises until it reaches the mouth, where two men seize it and, through a leather spout, turn the precious water into little channels connecting with the gardens. This they do over and over again until the hot, dry land has drunk its fill. Sometimes the

work at the well is kept up all day while other men in the fields are busy building up mud banks between some of the gardens and breaking them down between others, so that the water may reach all parts.

One of the most important improvements which England has made in India is in its systems of irrigation. Millions of dollars have been spent in building reservoirs, canals, and dams, and large areas of land have thus been made useful.

Have you read of the terrible famines in India? When there is no food for the people, and no money to buy any, when the inhabitants of large areas are starving, the government furnishes relief by hiring men and women from the famine regions to work on roads, railroads, and irrigation works. Many of the reservoirs and canals have been built by what is known as famine labor, and two objects have been gained: the laborers have earned enough money to keep themselves and their families from starvation, and the works which are built lessen the danger of more famines.

Starvation or plenty in India depend on the monsoons, those winds which shift with the seasons and bring a heavy rainfall to the land. In the summer India is intensely hot—hotter, in fact, than most lands in the same latitude. The lofty range of the Himalayas to the north serves as a high wall to shut in the tropical heat and to keep out the cooler winds from northern regions. The moisture-laden air from the ocean, being cooler than that over the land, blows in from the sea. The great mountain wall acts as a condenser, and throughout large parts of India heavy rains fall during the hot season.

Most of the farmers are very poor; they lay up nothing from year to year, and so are dependent, as you see, upon the regularity of the monsoons. The rainy wind seldom



FIG. 106. SEE HOW HE CARRIES HIS WARES IN A CURIOUS BASKET ON HIS BACK

fails them, but when it does there is terrible suffering, and in the regions where the monsoon fails to appear, thousands of men, women, and children and millions of cattle starve

to death. At the beginning of this century India suffered from one of the worst famines in her history, in which it is estimated that, before the new crops appeared, nearly one and a half million people starved to death. As more rail roads are built by which food supplies can be rushed to the sufferers, and as more irrigation works are completed which will make dependence on the monsoons less general, the chances of such awful disaster grow less and less.

Let us continue our walk through the village. The inhabitants are not all farmers ; there are other occupations which the needs of the people have called forth and which are carried on nearly everywhere in India. The potter is one of these village servants. He makes the earthen pots for cooking, for storing vegetables and grain, and for carrying water. See how he carries his wares in a curious basket on his back. Let us follow him to his home and watch him at work. There is a little pile of clay which he has dug up and brought home to use. He sifts some of it and from one of his jars pours some water over the sifted mass. Now he treads the wet clay over and over. His wife comes out to help him, and together they will knead it with their feet for hours until it is a smooth, soft paste. The potter then takes a quantity in his hands and molds it into a ball, which he shapes into the desired form by holding it against a revolving wooden wheel. With some tools he puts on some finishing touches and then sets the jar aside in the hot sun to dry. Some jars are simply sun-dried like the one before us, while others are baked in a kiln. For thousands of years the village potters have made jars for food and water in just the same way, with the same materials and the same tools which the man before us is using.



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**FIG. 107. FOR THOUSANDS OF YEARS THE VILLAGE POTTERS HAVE MADE  
JARS FOR FOOD AND WATER IN JUST THE SAME WAY .**

Down by the stream the village washerman is beating long pieces of cloth on the stones and spreading them on the grass to dry. He collects the clothes from the houses and brings them on his donkey to the stream, where he rinses them and beats them on stones and spreads them in



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**FIG. 108. DOWN BY THE STREAM THE WASHERMEN ARE BEATING THE CLOTHES AND SPREADING THEM OUT ON THE GRASS TO DRY**

the sun to dry. His father and grandfather before him held the office of village washerman, and after him his sons and grandsons will do the same kind of work. It is the usual custom in India for every boy to follow the trade of his father. Among the common working classes which make up the bulk of the population it would be an almost unheard-of thing for a son to engage in a new occupation.

If we had time, we might visit the village carpenter, who makes the carts, yokes, hoes, sickles, wooden spoons, and other articles which the people need, or we might stop to watch the village blacksmith shoe the oxen and ponies, make the iron share for the plow or mend a broken one, or make a hinge, an ax, a lock, or a reaping hook. His working place is under a tree or in his thatched hut, and his customers come from many scattered villages.

Another village workman who always has plenty of work on hand is the goldsmith. There are no banks in Indian villages, and if the people save any money, they have no safe place in which to keep it, unless they bury it in the ground. Some do this, but more of them exchange it for bracelets, anklets, finger rings, nose rings, and other ornaments, so that a man's wealth is often shown by the amount of jewelry which he and his wife wear. If Mother Goose had lived in India, her familiar couplet might have read as follows:

Rings on her fingers and one in her nose,  
Rings on her arms and her ankles and toes,  
She carries her riches wherever she goes.

See those two men squatting on the ground, facing each other. What in the world are they doing? Such a sight is a very common one in India. One of the men is the village barber, and a very important workman he is, too, in spite of his small equipment of roughly made razors, rusty scissors, and a small brass cup. He carries a small piece of iron to pare the nails of the fingers and toes of his customers. He has with him also a thorn extractor, which is a very necessary tool where all the people go barefoot.



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FIG. 109. ONE OF THE MEN IS THE VILLAGE BARBER

We must surely visit the bazaar man, or, as we should call him, the storekeeper. His shop is a mud hut, or shed, with baskets and earthen pots arranged in rows and tiers to hold his goods. Do you wish to buy some ginger, pepper, cloves, coriander seed, tamarinds, coconuts, dates, or sugar



candy? Perhaps you would like instead some betel leaf and nuts, which the natives of India chew more universally than boys and girls here chew gum. Chewing the betel leaf, however, does not improve one's appearance, as it turns the gums and saliva a bright red and makes the teeth dark.

The priest in an Indian village is a busy man. He not only conducts the services in the little temple, or mosque, but he is consulted by the villagers to decide many important questions. One, perhaps, wishes to know the lucky day on which he may buy a new bullock; another is planning to build a house, and asks the priest to name the right day for him to commence the work; another is waiting to know on which day to have his daughter's wedding; while a fourth asks him to name the person who stole his sheep. Most of the farm work is planned according to the lucky days which the priest names, and few farmers will begin any piece of work without consulting him.

There are still other workers in the village whom we have not seen — the schoolmaster, the oil presser, the watchman, the letter writer, and the basket maker. Besides these there are beggars, poets, musicians, and fakirs. The people, however, are not the only objects of interest; there are the bullocks and buffaloes and donkeys (which in India take the place of horses) and the sheep and goats. In some places in northern India we shall find elephants drawing loads, plowing, and doing other work. Snakes abound all through the country; they are so numerous, and the bites of several kinds are so poisonous, that more than twenty thousand people and five thousand cattle die from snake bites every year. One reason why so many natives are killed in this

way is because they go barefoot and so are easily bitten by snakes hidden in the grass.

In parts of India the tiger is the animal most dreaded. He is so sly and so hard to catch that in some villages the natives do not try to capture him, even though he makes nightly visits to the place and carries off a nice fat sheep for his supper. Hundreds of people and many times as many cattle are killed each year by this treacherous beast.

Lizards and frogs are very common in the villages ; they catch many flies and mosquitoes, which during parts of the year are a great pest. If we were to remain overnight in an Indian village, we might find a centipede on the bed, a scorpion on the wall, or a tarantula crawling on the floor. Perhaps with these things in mind you will not care to stay longer in the place. As we leave the little brown houses and make our way through the wheat, millet, and sugar-cane fields, we wonder whether we have been more entertained by the queer sights we have seen than the natives have been by our white skins, queer clothes, and strange-sounding language.

### TOPICS FOR STUDY

#### I

1. Hindu character.
2. Size of India.
3. Surface and drainage.
4. Government.
5. Traveling in India.
6. Irrigation in India.
7. Monsoons and their effects.
8. A visit to an Indian village : costumes, houses, religion, daily life, food, schools, workers, animals.

## II

1. Which workmen in an Indian village should you best like to be? Describe your work.

2. Sketch a map of India. Show its great rivers and the surrounding countries and waters.

3. Look in a cyclopedia and find a description of these rivers. Give a lecture to the class on one of them.

4. Contrast a Hindu village with one in China. Write a list of the differences; of the resemblances.

## III

Be able to spell and pronounce the following names. Locate each place and tell what was said of it in this and in any previous chapter.

Maine

Bengal

Calcutta

Himalaya Mountains

Brahmaputra River

Ganges River

Indus River

## CHAPTER XIII

### SOME INDIAN CITIES

Let us visit some of the cities of India, as the life there is very different from that in the country portions. India is a land of villages and has few large cities in proportion



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FIG. 110. BOMBAY IS THE EYE OF INDIA,  
LOOKING TOWARD THE WESTERN WORLD

to its population. It contains three times as many people as the United States, yet it has only one city with more than one million people, while the United States has three. India has eight cities of more than two hundred thousand inhabitants; in our country there are three times as many.

Bombay is the eye of India, looking

toward the Western world. The larger part of the foreign commerce is carried on from this city, and most of the travelers who enter and leave the country pass through this port. It is the richest, most up-to-date, and, next to Calcutta, the largest city of India.

Some of the men in the streets are dressed in European costume, but most of them show the scanty drapery, the abundant jewelry, the odd headdress, and the bare brown feet and legs that we saw in our trip through the villages.

In Indian cities, as in those of other countries of the East, the foreigners live in a section by themselves, and it would be possible for us to stay for years in Bombay or Calcutta without seeing the real Indian life. The streets, the shops, the tram-cars, the society, are very similar to those in England, while the mills and factories, with their modern machinery, remind us of Manchester, Leeds, and Bradford.

Old India, with its temples, its fakirs, its snake charmers, its dirt and smells, and its crowded bazaars, is not far away. Perhaps it will be well for us to go to this native portion of the city first, and then we can all the better appreciate the purer air and the cleaner streets of the foreign part.

The native quarter of Bombay is dirty and crowded. Hundreds of the natives have no homes, and live and sleep under carts, in sheds, or in the streets. There are many cook shops scattered through the city, and in them these outcasts sometimes buy food.



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FIG. 111. THE NATIVE QUARTER OF BOMBAY IS DIRTY AND CROWDED

The narrow houses of Bombay, four and five stories high, in which the natives are packed, are very different from the small one-story cabins of the villages. Heavy wooden shutters take the place of windows and keep out the heat much better. There is more room in the courts and yards at the back of some of the houses than appears from the street. A good deal of room is necessary because of the large families. Newly married couples in India do not set up housekeeping alone by themselves. The bridegroom always brings his bride to his father's house, which, if there are several sons, gets crowded as time goes on. In many buildings, therefore, the people are packed so close together that they cannot live in a comfortable, healthful way, and when the dreaded epidemics of the bubonic plague, small-pox, or cholera find their way into the city, the people of these crowded districts die by hundreds. During one plague epidemic in Bombay there were for a time five hundred deaths a day from this one disease.

How full the narrow streets are! Here are hurrying coolies with heavy burdens on their heads, fashionable rubber-tired carriages, and rude bullock carts. The driver of the street car clangs his bell constantly to warn the crowds out of the way. The stores, which occupy the lower story of the houses, have no windows or doors but are open to the street, and the half-naked merchant squats in the midst of his wares. We should not like to remain here long, as the odor of Eastern spices and perfumes, mixed with the smell of the perspiring crowds, is not pleasant.

There are queer sights all around. See that carpenter squatting on the ground, holding between his toes the board which he is planing. Look at that white cow sniffing the

vegetables displayed for sale, and now and then helping herself to a dainty mouthful. Few Hindus would speak harshly to a cow or strike it or even drive it away. The



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**FIG. 112. THE COWS CONNECTED WITH THE TEMPLES ROAM FREELY  
THROUGH THE STREETS**

cow is held sacred in India, and those connected with the temples are allowed to roam freely, resting in the streets or helping themselves to food wherever they choose.

Are those scantily dressed laborers women or men? Some of them are men, but many of them are women of the poorer classes. On their heads are piles of bricks which they are carrying to the mason who is working on that high building. Some of these mason's assistants do not look more than twelve or fourteen years of age, though



FIG. 113. WE ARE IN THE LAND OF SNAKES AND SNAKE CHARMERS

they may be several years older. Perhaps one reason why they do not grow taller is because of the custom of carrying heavy burdens on their heads when they are very young.

We are in the land of snakes and snake charmers. There is a crowd gathered around a man squatting on the corner with his basket of snakes before him. See! he opens the basket and plays softly upon a little pipe which he



holds in his mouth. The snakes like the music and come crawling out of the basket. They curl up in front of the man and raise their heads to listen, swaying gently from side to side. The charmer catches hold of one in a safe way and puts it around his neck or allows it to twine itself about his arm.

These snakes are cobras, the most dreaded and the most dangerous reptiles of India. Sometimes their poisonous fangs have been extracted before the charmer handles them. Sometimes he boasts that this has not been done and that he can charm them so that they will not bite him, or, if they do, he claims to have a holy stone in his mouth which will prevent the poison from taking effect. It is a strange sight and one which we do not particularly enjoy, so we are glad to leave the place and make our way into the part of the city where the foreigners live and work.

Wherever Western influence touches an oriental city we find the streets broader, straighter, and cleaner, the buildings finer, and the people less crowded. No city in the world has finer public buildings than Bombay. They are built of stone and are arranged with fine artistic effect. On one side of a broad boulevard, facing the ocean, are grouped buildings of the University of Bombay, the library, the post office, the government headquarters, the city hall, and the Victoria Railroad station, one of the finest and largest in the world. Besides these there are the mint, the sailors' home, the high school, hospitals, churches, and other institutions. Some of these buildings have been built by the city, and many are the gifts of wealthy residents.

Many of the wealthy people are Parsis, descendants of the ancient fire worshipers of Persia. They still cling to their



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**FIG. 114. THE VICTORIA RAILROAD STATION IN BOMBAY IS ONE OF THE  
FINEST IN THE WORLD**

old religion and use fire in all of their religious ceremonies. The sacred fire in their temples is never allowed to go out. They have many peculiar customs which distinguish them from the Hindus, one of which is the manner of burying

their dead. Both earth and fire are sacred in their eyes, so they will neither bury nor burn their dead. Perhaps you have heard of their "towers of silence" in Bombay. They are immense white structures forty feet high and seventy or eighty feet in diameter, on the top of which, radiating from the center like spokes in a wheel, are compartments in which the bodies are placed so that vultures may pick



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FIG. 115. THE TOWERS OF SILENCE OF THE PARSIS ARE IMMENSE WHITE STRUCTURES

the flesh from the bones. Though this custom seems horrible to us, the Parsis, many of whom are refined, educated people, consider it less dreadful than any other method of disposing of the dead.

Let us take a ride along the Queen's Road, named for the good Queen Victoria. There is no finer drive in any city of the world. The splendid public buildings on one side, the ocean view on the other, and the broad, shaded, well-kept avenue make us forget the crowded, unattractive quarters of the natives. On a ridge of hills at one end of

Bombay is Malabar Point, where the governor lives and where there are many fine residences and beautiful bungalows with broad piazzas, gardens, and shade trees. If any cooling breeze from the water is stirring, it is sure to touch this narrow point of land.

Across the country to the northeast is Calcutta, the largest city of India and for many years the capital. In 1911, during the visit of the king and queen of England, it was decided to change the capital to Delhi, a very interesting city which we shall visit later.

We can go from Bombay to Calcutta by rail in about forty hours. We must not forget to take with us our roll of bedding and a basket with plates, cup, biscuits, fruit, and canned foods. Everybody accustomed to travel in India carries these things, and no provision is made for those who do not follow the customs of the country.

We will travel first class, and although we are accustomed to the luxury of Western trains, we shall find those in India very comfortable. In the second-class cars the benches are too narrow for beds, and there is danger of rolling off if we attempt to turn over. They are too wide for seats in the daytime, unless we curl up cross-legged as the natives do. In the third-class cars the natives are often packed closer than we should pack animals. Eastern people like going in crowds, and Hindus do not object to being crowded by others of their own class.

Calcutta is situated a hundred miles from the Bay of Bengal, on the Hugli River, one of the mouths of the Ganges. The delta plain of the river—low, level, moist, and covered with a luxuriant vegetation—is one of the largest in the world. We pass hundreds of small villages

nestling in the jungle, the low mud huts shaded by tapering coconut trees, feathery bamboos, and broad-leaved banana trees. Each village has its little temple, and near it its dirty tank, which, as one writer says, gives the place its water and its malaria.

I wonder if you will be disappointed in Calcutta. Parts of it, where the great factories and mills and business houses are situated, are not very different from similar portions of Western cities. Even here, however, the street scenes make us realize that we are still in the Eastern world. There is a strange medley of people and teams. Look out, as you cross the street, that you are not run down by an automobile, an electric car, or by that splendid carriage with its liveried footman and coachman, and its prancing horses. How queer it seems to see such conveyances side by side with rude, springless bullock carts and perspiring coolies staggering under heavy loads. How should you like to ride after a pair of bullocks? The driver sits close behind the animals, and occasionally twists their tails or kicks them with his bare feet when he wishes to go faster. We shall see hundreds of such conveyances on our trip through India, as they are used everywhere. In some parts of the country the wheels of the carts are solid, roughly rounded pieces of wood, and the jolting of such teams is painful business for the passengers.

As the sun gets lower in the sky we will take a drive through the Chowringhee, the finest street in Calcutta. We are astonished to see such splendid buildings, churches, hotels, clubs, and shops, lining one side of the avenue. The stores remind us of those in large cities in the United States. There are many where the display of jewelry is

fascinating; the windows show all kinds of glittering gems, dainty, delicate ornaments, and heavy chains and girdles. Rich native princes, when dressed for some festive occasion, wear a great quantity of jewelry; poor coolies invest their savings in gems and ornaments instead of in the bank, and this custom accounts for the scores of small jewelry stores which are found in every city of India.



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FIG. 116. WE WILL TAKE A RIDE THROUGH THE CHOWRINGHEE, THE  
FINEST STREET IN CALCUTTA

Most of the natives of Calcutta do not patronize these fine large shops on the Chowringhee, but buy their goods much more cheaply at the bazaars. It will not do us much good to go there, as every native merchant puts his prices up to exorbitant figures when he sees a foreigner approaching. The best way for us to do is to visit the bazaars and look at some of the wares, and then to get some native to make our purchases for us. Even though he helps himself

to what he considers a fair commission, the total price is much less than what we should have had to pay.

We have been so interested in these curious shops that we have given no attention to the other side of the street. The Chowringhee extends along the edge of a fine park which stretches for miles along the river. How beautiful it is! There are imposing monuments and shady walks, and smooth drives thronged with all kinds of carriages filled with people in every variety of costume that one can imagine.

There are several names which you can apply to Calcutta, and your choice will depend on the impression which the city makes on you. If beautiful buildings and elaborate architecture attract you, you may call it The City of Palaces. If you are sensitive to smells as you ride through the narrow streets of the native quarter, you may call it, as one writer does, The Place of Stenches. If in your rambles you pass some of the six hundred tanks where the natives bathe, you may call it The City of Filthy Tanks. Perhaps your visit happens to be in the summer, when the tropical sun shines down on the low land with so fierce a heat that the pavements scorch your feet, and the anklets and bracelets almost burn the limbs of the natives. In order that you may breathe through the hot, stifling night, a coolie pulls steadily at the rope attached to the punkah, the canvas fan fastened to the ceiling of your room. As you lie panting in the intolerable heat, perhaps the most appropriate name that you can think of is The City of Terrible Nights.

During the hot season, on the streets, sidewalks, doorsteps, and in the parks, scores and hundreds of natives

can be seen, covered from head to foot in their long garment, consisting of a single strip of cloth, sleeping soundly in spite of dirt and noise and heat.

Many of the wealthy people and the officials leave the city during this season, as the heat is so great that few white



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FIG. 117. SIMLA IS A GAY LITTLE PLACE NESTLING AMONG THE MOUNTAINS

people can endure it. The higher officials and their families go to Simla, a gay little place in the mountains, where during the summer months they combine work and play.

Simla has a population of about fifteen thousand in the winter and about twice as many in the summer. Handsome buildings with every convenience have been erected for government purposes, so that the work of the officials



goes on with little interruption. There are lovely summer residences and cool tents for camping, from which one can enjoy beautiful views, snowy peaks, deep valleys, and narrow gorges. There are drives and parties, tennis and golf, and all kinds of gayeties during the time that the visitors from the plains make it their home.

Nestling among the Himalayas, nine thousand feet above sea level, is Darjeeling, another summer resort as gay as Simla. In the thinnest of thin clothing we will leave Calcutta in its tropical jungles, its fern trees, and its awful heat. The road winds slowly upward, between acres and acres of tea plantations, toward the great



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FIG. 118. NO SUCH ARRAY OF SNOW-CAPPED PEAKS CAN BE SEEN ANYWHERE ELSE IN THE WORLD

mountain wall, and in less than twenty-four hours we are glad of thick clothing in which to enjoy the magnificent view which Darjeeling affords.

No such array of snow-capped peaks, immense snow fields, and blue glaciers can be seen anywhere else in the world. Mt. Everest, the highest peak on earth, is less than one hundred miles away and beautiful in the hazy distance. For nearly two thousand miles along the northern boundary of India stretches this immense mountain wall,

which, by its lofty height, its fierce winds, its deep snows, and its awful cold, protects India from invasion better than the best drilled and equipped army could possibly do.

The mountain barrier which separates the British possessions from the rest of Asia contains several passes, but so far-stretching are the deserts beyond, so bleak and barren the country, that little travel is possible through most of them. There are two, however, on which England keeps a watchful eye. One, beyond Darjeeling, is the pass through which for centuries caravans loaded with tea, opium, wool, hides, silk, and cotton have passed between India and China. The other way through the mountains on the northwestern frontier is the Khyber Pass. This is India's back door, the only way by land from western and central Asia to the British possessions. Probably no other spot in the entire area of more than one and a half million miles has given government officials so much anxiety as this one narrow gateway about thirty miles long. A noted traveler in India expresses in a humorous way a good deal of the real feeling of England when he says, "Every time there is a stir in a clump of bushes, every time a board creaks in the floor, every time a footstep is heard under the window, the goose flesh rises on John Bull's back, and he imagines the great Russian bear is smelling round the back door of his empire in India."

For centuries this narrow gorge has been the only overland route into India. The kings of commerce and the masters of war have all used it, and if, as many English fear may sometime happen, the Russians ever do invade India, they will be forced to make use of this highway. Every southward step of the Russian bear is noted

with great concern by the British. Every commercial treaty, every peaceful alliance which Russia makes with the countries in southwestern Asia, is followed by increased vigilance on the part of the English over this route, by which alone India can be entered on its landward side.



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FIG. 119. FOR CENTURIES THE KHYBER PASS HAS BEEN THE ONLY OVERLAND ROUTE INTO INDIA

At present the British control both ends of the Khyber Pass. It is guarded by the Afridi, wild tribes of the region, who are paid annually both by the English and by the Ameer of Afghanistan. In return they agree to allow no armed troops to cross the pass without the consent of

the nations at both ends. The Afridi promise also to protect all travelers crossing the pass on two days of each week. On any Tuesday or Friday the trip over the mountains is comparatively safe, and you would be protected by the very tribesmen who on any other day might rob you of all your valuables. On these days the pass is crowded with caravans. Lines of camels, mules, and donkeys come and go from Persia, Afghanistan, and Russian Central Asia to India.

The Ameer of Afghanistan is paid about six hundred thousand dollars a year to keep friendly with the British, to make no alliance with Russia, and to guard his end of the pass. The Ameer is very independent, easy to take offense, and not entirely to be trusted, and the English depend more on their efforts to keep him in good humor, and to make him realize the advantages of an alliance with them, than on his loyalty.

Near the southern end of the Khyber Pass we will take a train down to the Ganges valley, where some of the oldest and most interesting cities of India are situated. The railroad follows the great trunk road of India, which for centuries has been the route by which people from beyond the mountains have reached the cities and the riches of the Ganges valley. For fifteen hundred miles the great highway runs through the heart of India, shaded part of the way with fine, large trees. The smooth, hard division in the middle takes the quick traffic, while the rougher roads at the sides are for the heavy carts. To journey on this road is to see India. Even since the building of the railroad it is traveled by occasional caravans of camels and more rarely by elephants, while mules, donkeys,

and bullock carts are ever upon it. Long-haired beggars, gayly dressed villagers, strolling jugglers, sellers of sweetmeats and of holy Ganges water, strong-armed women who are to serve as earth carriers where new railroads are building, pilgrims, potters, barbers, and priests come and go in the crowd with which the road is constantly filled.

The first city at which we will stop is Delhi, the newly selected capital of India. Once upon a time, as all Eastern stories begin, the Mohammedans conquered India, and the great Moguls, as their rulers were called, sat in Delhi upon the peacock throne. This is the most famous throne on which any ruler ever sat. It consists of a block nearly six feet square covered with gold, inlaid with all manner of precious stones, and mounted on golden feet. Behind this block there stood in former years two great peacocks with outspread tails. The wonderful circles and colors and eyes of a peacock's tail were represented by diamonds, pearls, rubies, sapphires, emeralds, and other gems set so wonderfully that the effect was that of a living bird. When the Persians invaded India, they carried away this wonderful throne, which, minus the peacocks, is still used by the shah.

Many people of India think that Delhi should always have remained the capital of the country, and are glad that it has again been made so. It is splendidly situated in the fertile Ganges valley on the route to the western countries and nearly equidistant from Calcutta and Bombay, the two largest cities of India. It receives much raw material from northern regions both within and beyond the Indian border.

Directly north of Delhi, in the part of India which stretches northward to the Hindu Kush Mountains, is the land of Kashmir. Most of the people of this part of India

are herders and keep many camels and large flocks of sheep and goats. These furnish the fine, soft under wool, or down, from which for centuries cashmere cloth and especially the famous cashmere shawls have been made. These wonderful



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FIG. 120. WE CAN WATCH THE PEOPLE OF KASHMIR WEAVING SHAWLS

shawls, so fine and soft that you could draw one through your napkin ring, are woven and embroidered in the huts of the people of Kashmir. In a trip through Kashmir we should hear the clatter of the loom in many a house, and through its open front could watch the people weaving cloth, rugs, and shawls. These are loaded onto camels, and the caravans slowly wend their way southward for

three hundred miles to Delhi, which is the distributing point for these fabrics. We should think, from the quantities of shawls displayed in the bazaars and shops of Delhi, that most of the people of India must be engaged in making them, but we are told that most of them come from the one province of Kashmir. These shawls are not so fashionable

in Europe and America as they once were, but, wrapped in folds around the head, they are worn by many of the young men of northern India. This head covering is as common there as straw hats and soft caps are here. The shawls wear for long years and are usually handed down from father to son as a part of the family inheritance.

You will see other beautiful fabrics in Delhi, for since the time of the Mogul emperors it has been one of the centers of Indian art. You can find there exquisite ivory carving, so fine and delicate that the artist spent years of his life in making a small piece. You can find silks and satins heavy with embroidery of gold and silver thread. The coronation robe of Queen



FIG. 121. LET US RIDE DOWN THE MAIN STREET OF DELHI

Alexandra was made in Delhi, and many ladies of the nobility in England and other European countries order from this Indian city materials for costly dresses.

Let us ride down the main street of Delhi. It is a splendid, broad thoroughfare lined with fascinating shops in which are displayed jewelry, shawls, rugs, carved ivory, and embroideries. We do not need to get out of our carriage, as the merchants from both sides of the street rush out to us and run alongside, pushing one another out of

the way, holding up samples of their wares, and jabbering as fast as their tongues can go. We cannot understand a word they say, but their gestures and their expression tell us that they are urging us to buy and saying that their goods are much better and cheaper than those of the other merchants whom they thrust aside in the scramble. It is amusing at first but soon becomes tiresome, and we give up our idea of buying anything and go instead to see some of the wonderful buildings of Delhi, relics of the luxury and wealth of the Mogul emperors.

In the center of the city stands one of the most famous mosques in the world. One writer tells us that it took ten thousand laborers, working daily for ten years, to complete the great structure. The walls of gleaming marble and dull red sandstone and the immense domes of white marble trimmed with black make a picture of Mohammedan architecture which we shall never forget.

On the plains about Delhi are ruins of temples, tombs, forts, and palaces dating back for more than two thousand years. More than half a dozen cities have occupied in turn the site of the present Delhi, and each has left some relic to tell of its wealth or beauty or strength. Some of the tombs are marvelous buildings of white marble, and we think as we look at them that they must be finer than any in other parts of the world.

There is, however, not far away at Agra, a building far more beautiful than any of these at Delhi. Indeed, it is said to be the most beautiful building ever erected anywhere in the world. It is called the Taj Mahal. It was built in the seventeenth century by the most famous of the Mohammedan emperors as a tomb for his favorite wife.



It took twenty thousand workmen more than twenty years to build it, and it cost more than twenty million dollars. As we approach we can see its domes and minarets, but we



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**FIG. 122. NO OTHER WOMAN EVER HAD SUCH A MONUMENT ERECTED TO HER MEMORY**

are not prepared for the beauty which bursts upon us as we enter the garden. The building, a jewel of pure white marble, rises two hundred and fifty feet from the terrace on which it stands—so pure, so perfect, that we find it

almost impossible to believe that it is the work of human hands. The marble of the interior is set with precious stones and traced with delicate carvings. It is said that the whole of the Koran, the Mohammedan Bible, is inlaid in black mosaic upon the inner walls.

In the center of the building, resting on the floor of marble and jasper, is the mausoleum containing the tombs of the emperor and empress. This is completely covered with carvings of flowers so dainty and delicate that it looks like satin covered with embroidery. The roses, lilies, carnations, and other flowers are made in their natural colors by inset gems. In one single carnation there are said to be thirty-five varieties of carnelian stone. Perhaps some of you have seen a mosaic pin in which different stones are set in some design. The finer mosaics are very valuable, as it takes great skill and a long time to do the work well. It seems impossible to believe that upon the walls of the Taj Mahal there are, as is estimated, about two acres of surface covered with fine, delicate mosaic work. Every variety of precious stone has been used to produce the wonderful effects. No equal amount of such work can be found in any other building in the world. No other woman ever had such a monument erected to her memory.

It is hard to tear ourselves away from the Taj Mahal, for it presents more beauties every time we look at it. In the morning sunshine, in the fading twilight, most of all in the silvery moonlight, it seems unreal and like some heavenly mansion let down from the sky, and as we drive away we watch for a last glimpse of its slender white minarets against the blue sky.



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**FIG. 123. EVERY HINDU WISHES TO WORSHIP IN BENARES**

We will follow the Ganges River until we arrive at the city which to a foreigner is perhaps the most interesting place in India—Benares, the holy city of the Hindus. Every Hindu and every sick person in India wishes to go to Benares to die in order that he may be sure of happiness in the next life. Nothing on earth makes a Hindu so happy as to bathe in the Ganges and thus wash away his sin. Trainloads and cartloads of pilgrims arrive daily in the great city. Thousands walk to it from great distances, carrying no luggage except a brass bowl for religious ceremonies, a gourd for drinking purposes, and a bottle for holding the holy water of the river. Dead bodies are sent to Benares to be burned, and the ashes are scattered on the waters of the sacred river. We of the United States cannot imagine such a place. One must see it to realize that a city like Benares, with its two hundred thousand people, its two thousand temples, its twenty-five thousand priests, and its five hundred thousand idols, really exists.

We shall see many things in the streets to interest us. They are lined with tall houses in which it is probable that there are more old and sick people than in any other city in the world. There are palaces built by wealthy Hindus who expect to become holier by living for a part of each year in the holy city. In the little shops with open fronts you can find every kind of brass bowl imaginable, as each pilgrim must have one to use in worship. There are shops with idols and rosaries for sale, and stall after stall filled with freshly gathered flowers. Every idol in the city is decorated with them, every temple receives bushels each day, and floral offerings of every description are scattered in quantities on the waters of the river.

Why does that man lie on a bed of spikes at the entrance to the temple? He is a fakir, a very pious Hindu, and he believes that the more he tortures his body the holier he is.

Why does that woman keep falling down? Is she ill? No, but it seems as though she would be, for she has been



FIG. 124. THE JUGGLER THRUSTS HIS SWORD AGAIN AND AGAIN INTO THE BASKET

prostrating herself all the way around the city like an inchworm, falling and extending the length of her body on the ground, drawing herself up again, and then repeating the process over and over. She thinks that she will gain much more favor with the gods by making her pilgrimage in that difficult way than if she went as nature intended that she should, on her two feet.

What wonderful thing is that juggler on the corner doing that he has drawn such a crowd about him? He is doing the famous mango-tree trick, which is considered the most wonderful sleight-of-hand performance that even Hindu jugglers, who are the most skillful in the world, can perform. He takes a mango seed, plants it in a little pot, and covers it with earth. In a minute or two he removes the cover and shows you a tiny green sprout, and in a few minutes more you see the small plant. Each time that he removes the cover the tree is larger, until it finally becomes a small bush, bearing fruit which he picks and hands to you. You rub your eyes in amazement and wonder if you are dreaming. But look sharp! He is fastening that naked brown boy into an empty basket which stands before him. Now he picks up a sword which lies at his side. See him jab it again and again into the basket! Hear the cries of the poor child! Look at the blood on the sword! How horrible, you say. Yes, but see, here comes the child running out from across the garden plot, laughing at your astonished faces! Nobody knows how the juggler does such wonderful things. Experts from Western countries have watched Indian jugglers, but some of their tricks still remain unexplained.

How full the narrow streets of the poorer parts of the city are! There are hundreds of pilgrims, wretched widows, sacred bulls, and buffaloes with loads of wood on their backs. Perhaps you wonder why the people in a city on the boundary of the torrid zone need so much wood. Let us go for a row on the river and you will see what is done with it. Benares stretches for two miles along the Ganges. The bank on which the city lies is steep and crowded with

houses and palaces, above which rise hundreds of temples. Leading down to the water are immense flights of steps; these are crowded with people, some going down and others, in dripping garments, coming up from the river and holding carefully in one hand the bottle filled with



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**FIG. 125. THE BANK ON WHICH BENARES LIES IS STEEP AND CROWDED WITH HOUSES, AND IMMENSE FLIGHTS OF STEPS, USUALLY CROWDED WITH PEOPLE, LEAD DOWN TO THE WATER**

holy water. Each bather takes a swallow from the muddy, filthy river. It makes one sick to think of drinking such stuff, but the Hindu does not mind the dirt, believing, as he does, that by the drink and the bath he has washed all his sins away. See the bonfires on the bank! They are funeral piles where the bodies of the dead are being burned. The more money one has to buy wood, the larger fire he

can afford. It is for these funeral fires that the buffaloes were bringing their loads into the city. The wood is heaped up, the body is laid on the pile, more wood is put on, and it is then set on fire. Afterward the men scatter the bones and ashes in the river and the mourners go home believing

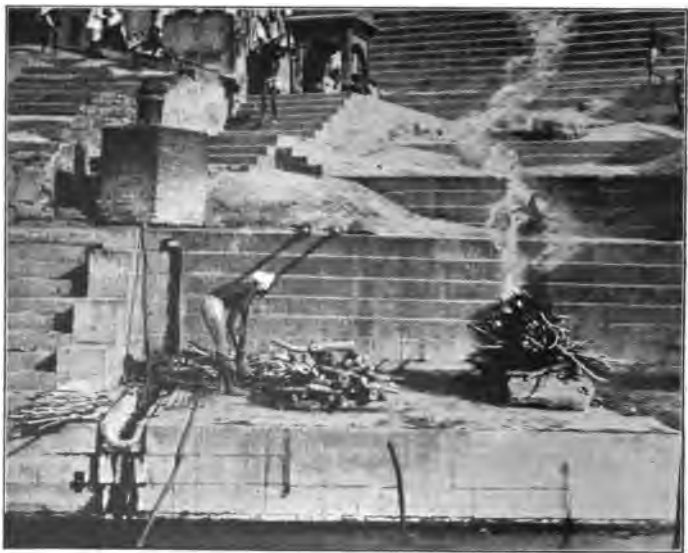


FIG. 126. SEE THE BONFIRES ON THE BANK

that the dead person has by this ceremony attained eternal happiness. It is a sad sight, and we wonder, as we leave the scene to continue our journey, whether these religious people will ever realize that the worship of their hideous idols does them no good, that the drinking of the filthy water of their holy river spreads disease and suffering, and that the customs and religion of the Western world, which to-day they scorn, are infinitely better than their own.



## TOPICS FOR STUDY

## I

1. Size of Indian cities.
2. Description of Bombay.
3. The Parsis and their "towers of silence."
4. Traveling in India.
5. Description of Calcutta.
6. Simla, the summer capital.
7. Darjeeling.
8. The Khyber Pass.
9. England and Russia in Asia.
10. The great trunk road.
11. Delhi, the capital of India.
12. The vale of Kashmir and cashmere shawls.
13. The Taj Mahal.
14. Indian jugglers.
15. The holy city of Benares.

## II

1. Sketch a map of India and on it show all the places mentioned in this chapter.
2. Name any cities in the United States that are about as large as Bombay; as Calcutta. See if you can find any other cities of the world in about the same latitude.
3. Compare the Ganges River and the Mississippi in respect to length, direction, deltas, cities, industries, traffic.
4. What other famous old buildings or ruins in the Eastern Hemisphere do you know besides those mentioned in this chapter?
5. What city in India would you like best to visit? Give the reason for your choice.
6. Find the latitude of India. Name some other country in the same latitude.
7. What is the longitude of India. In what part of the world would you be if you traveled as many degrees west of the prime meridian as India is east?
8. What is the name of the mountain pass between India and Afghanistan? Of what other famous pass have you read in this book?

## III

Be able to spell and pronounce the following names. Locate each place and tell what was said of it in this and in any previous chapter.

Russia	Ganges River
China	Bay of Bengal
England	Manchester
Siberia	Calcutta
Persia	Simla
Afghanistan	Bombay
Manchuria	Delhi
Kashmir	Darjeeling
Himalaya Mountains	Agra
Hindu Kush Mountains	Benares
Mt. Everest	London
Khyber Pass	Leeds
Hugli River	Bradford

## CHAPTER XIV

### INDIAN FARMS AND FACTORIES

We have seen the people of India at home in their villages and cities, but as nine tenths of them depend on farming for a living, we will now visit some of their farms.

Cotton is one of the most important crops of India. The fields look very much like those of our Southern states, but the brown-skinned, scantily draped, turbaned workers do not resemble our negro pickers, neither do the clusters of bamboo huts resemble the scattered wooden cabins in which many of the negroes live.

The area devoted to cotton in India is about as large as the state of West Virginia, and the amount of fiber produced would fill many thousand freight cars. About half of this long trainload of raw cotton is manufactured in India, and the rest is sent chiefly to Japan, Germany, and England. Perhaps you have never thought of India as doing much manufacturing. There are, however, many cotton-mills in Bombay, and in Calcutta there are large factories for the manufacture not only of cotton but of other products which the rich soil of the country produces in such abundance. The cotton-mills of India manufacture annually enough yards of cotton cloth to stretch to the moon and back, and so much yarn that it would require between two hundred fifty and three hundred thousand horses, each drawing a ton, to haul it away.

As we learn these facts we begin to realize that India has vast possibilities before it in manufacturing as well as in agriculture. The cheap labor, the ease with which the raw material can be obtained, and the great markets near at hand in the crowded cities, all tend to make India one of the greatest manufacturing countries of the East.



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FIG. 127. THERE ARE MANY LARGE MILLS AND FACTORIES IN BOMBAY AND CALCUTTA

turbaned workers cutting the large reeds, some of which are nearly three times as tall as they are. The inner bark is a strong, coarse fiber, and after the outer bark is rotted off (or "retted," as the process is called), this fiber is manufactured into heavy brown cloth, most of which is used for sacks in which much of the grain, coffee, sugar, and other crops are packed for shipping.

Fiber plants grow well in India. The flax flourishes there as well as it does in the low fields of Ireland. When studying Europe you probably read something of the manufacture of jute in Dundee (Scotland) and in other places. This jute fiber comes from India. The plant is a kind of reed which grows in low, moist regions to a height of from twelve to fifteen feet. See those brown,

The low delta plains of the province of Bengal produce enormous quantities of jute, and Calcutta is the most important city in the world both for the manufacture of jute bags and bagging and for the shipping of the fiber and its products. The mills along the river are so busy that in one year there is exported from Calcutta enough jute cloth to wrap around the earth at the equator about twenty times, and enough jute bags to give three or four to each person in the United States; and besides manufacturing all these products, Calcutta exports nearly as much jute fiber as she uses at home in her factories.

The prettiest fields which we shall see in India, or indeed in any Asiatic country, are those where the poppy is growing. We shall find most of these farms lying just north of a line drawn through Calcutta. The entire industry of poppy raising and opium manufacture is in the hands of a government commission, who decide each year just how many acres shall be given to the crop. No farmer is allowed to raise poppies without a license, and none can sell his product to anyone except the government agents.



FIG. 128. THE PRETTIEST FIELDS OF INDIA  
ARE THOSE WHERE THE POPPY GROWS

Let us visit a poppy farm and see the farmer at work. We are told that the plant requires a very rich soil and a good deal of moisture to make the sap flow well. The seeds have been sown in November, and during the latter part of January the plants begin to blossom. When the petals are ready to fall, they are picked by women and children, who afterwards heat them over a slow fire and work and press them into thin mats or sheets which will be used later in the opium factory. In March or April the farmer begins to collect his harvest. In the afternoon he goes into the fields and with a peculiarly shaped knife makes a cut around each seed pod. During the night a milky juice exudes, drop by drop, which soon turns brown and becomes gummy. In the morning the farmer carefully scrapes this substance into a jar, which, when full, he allows to stand for some weeks until the government inspector comes to examine its quality, to weigh it, and to buy it. Then the big earthen bowls of paste are taken in bullock carts to one of the government factories near Benares. The establishment covers several acres and employs thousands of hands. Brown coolies, staggering under the weight of heavy jars, carry them to a large room filled with great stone vats holding hundreds of pounds of the mahogany-colored paste. Look at those coolies jumping into the vats. By the help of ropes stretched above them they tread and knead the gummy mass until it is soft and smooth. No wonder the men look hot and tired, for it is exhausting work and they can remain in the vats for only an hour or two at a time.

The opium is next carried to the caking room, where each of the laborers is provided with a flat board, a brass cup, an earthen bowl, and a pile of the thin brown sheets made

from the poppy petals. Let us watch this man at work. He tears off a piece of the "trash," as the mat of poppy petals is called, puts it into his cup, and wets it with some liquid from his bowl. He adds another sheet of the matting and gives it a wetting with the liquid. He continues doing this until he has a layer about half an inch thick. Now an assistant hands him a lump of opium from the vats. He molds this with his hands, drops it into the cup, wraps the matting around it so that it is closely covered, smears the ball over with liquid opium, lays it on his board, and begins on another one. It takes him about five minutes to make a ball which, though only the size of a croquet ball, is worth several dollars.

Laws in regard to the sale of opium in India are very strict. Each dealer is licensed, and the amount that he can sell to any one customer is limited. From the sale of the drug and from the licenses the government receives a large income, which at times has been greater than that received from any other source except from the land taxes.

The sap is the only part of the poppy plant which has a stupefying effect, and the seeds and other portions are used freely by the people. The young plants which are weeded out are eaten, and the seeds are pressed for the oil which they yield in much the same way that cotton seeds are pressed to extract the cottonseed oil. The oil from the poppy plant is used for cooking, for lighting, and for making soap. After the oil is extracted, the seeds are pressed into cakes, which are used as a cattle food. The plants are left standing in the field until they are thoroughly dry, when they are collected and crushed and used for packing around the balls of opium.

Indigo is another peculiar crop of India. Perhaps the blue dress or tie which you are wearing was dyed with the product raised on some Indian farm, though it is more likely that a dye made from coal tar was used. Since a German chemist discovered how to manufacture artificial indigo from coal tar, fewer plants are raised in India, where not many years ago the crop was one of the most valuable productions. In the nicest goods, however, the Indian dye is often used, as it takes a soft, pretty color which is absolutely fast and fadeless.

Let us take a hasty trip to one of the famous farms in the Bengal province and then to the factory where the dye is made. If we would see the farmers at work, we must make an early morning visit, as the leaves are picked almost before daylight. Before the sun has risen high in the sky, the bullock carts are piled with their green loads and the roads are filled with a long procession of the heavy, lumbering teams crawling slowly toward the low factory perhaps several miles away. The farmers carry heaping baskets of leaves into the building, and coolies empty them into great vats, where other coolies, nearly buried in the green mass, are treading them down.

When a vat is filled, water is added and the leaves are left to soak for a day or more. How queer the water looks! In one vat it is just turning yellow, in another it has a blue tinge, while in a third it is fermenting and is covered with a white froth. Over there is a vat where coolies are drawing off the liquid into large tanks in another room. What a steaming and a splashing! See the great paddles, run by machinery and revolving at a high rate of speed, beat the water to a foam. As the beating continues, the color changes



and a blue scum forms on top. As this grows thicker it settles to the bottom and the liquid grows clearer. Then the water is drawn off and the powdery substance in the bottom is strained through wire gauze and cloth. Now we will go into the boiling room. Here the steam is thicker than in a dozen laundries, and through the clouds we can see brown figures hurrying to and fro and stirring the bubbling blue liquid in the great tanks. The powder which is finally deposited is strained again, then dried and pressed, and finally packed in boxes and sent to Calcutta, whence most of it is shipped away.

Have you heard the Eastern legend of the origin of the tea plant? Once upon a time a prince of India determined to lead a holy life. In order to do this, Eastern people think it necessary to torture the body in some way. So the prince decided that he would never go to sleep. He tried in every way possible to keep awake, but after holding to his vow for several days he became so exhausted that he suddenly fell asleep. On awaking, he was so angry at having broken his vow that he cut off his eyelashes, which he had sworn "should never rest on tired lids," and threw them from him. The next day he noticed that a strange plant had sprung up where his lashes had fallen. He gathered and ate some of the leaves and felt so refreshed that he was enabled to keep his vow for a long time.

Whether or not you believe the whole of the story, it is true that tea is one of the most refreshing of drinks. So much is grown in India that to-day tea is one of the most valuable exports of the country. We shall find tea farms on the slopes of the hills and in terraced gardens on the mountain sides. Some of the best farms may be found in the

province of Assam, and it is said that the highest-priced tea in the world comes from the slopes around Darjeeling. You read in Chapter IV of the large scale on which tea farming is conducted in India, and the scientific methods which are used in its manufacture. It is doubtless due to these improvements that the industry has developed so rapidly and that Indian teas are in such demand.

If we were to visit all the kinds of farms in India, we should have to remain in the country a long time. There are among others the licorice farms, where the farmer cultivates the low shrubs for the roots from which are made the long, black, sweet sticks which you find in the stores.

Immense quantities of sugar cane are raised, especially in the southern part of India, and a field of the tall, waving stalks ten or fifteen feet high is a fine sight. On many plantations bullocks do the work which in the United States is done by machinery. The patient animals, walking round and round in a circle, turn the big wooden or steel rollers which crush out the juice. Sugar is made by boiling down the sap. All of the work is done in a very crude way. The boiling liquid is skimmed with a great scoop fastened to the end of a long pole, and the sugar which is made looks coarse and brown and not very appetizing. How different it all is from the vacuum pans and filters and the other machinery used in the United States!

The crops on which the natives of the country depend for their chief food supply are rice, millet, and wheat. These are raised in all parts of India, though most of the rice is grown in the south and more of the millet and wheat in the northern portion. The sound of women pounding rice

with a heavy wooden pestle, and the sight of them grinding the other grains between two stones, are as common in India as the rattle of a mowing machine and the sight of a load of hay are in our country.

In the United States we hear a good deal about labor unions and trouble between labor and capital. In India you will hear little of such questions, but you will both hear and see a great deal concerning caste. The people of India are divided into classes, and each class, or caste, is governed by laws in regard to its food, dress, occupation, and manner of life. There are five chief castes: first, the Brahmans, or priests; second, the warriors, from whom come the kings and rulers; third, the farmers and traders; fourth, the common laborers; and fifth and lowest of all, outcasts, or people of no caste. These are divided and subdivided into dozens of classes, and the whole question is so complicated and so different from anything in the West that it is very difficult for a foreigner to understand much about it.

The divisions which I have given are classified according to occupation, yet caste does not depend on that alone. This is illustrated by the fact that a Brahman, the highest caste of all, may cook for others of his own class. It is necessary that this should be so, as no Hindu, of whatever caste he may be, will eat anything prepared by a person of a lower caste than himself. Can you imagine what confusion it would cause in the United States if a lawyer could not eat with a shoemaker, or marry the daughter of a storekeeper, or have anything to do with a minister? During your visit in India you must remember that you are an outcast, and that if you touch the cup out of which a Hindu

is drinking, or even see the food which he is about to eat, he must throw it away. If you let your shadow fall on him while he is at his meal, you will cause him a great deal of trouble, as he will neither drink the water nor eat the food set before him. He must purify himself and bathe before he can eat again.

A person must always remain of the caste into which he was born and must follow the rules which govern it. He must not eat certain kinds of forbidden food ; he must not marry a widow ; he must never change his religion or worship other gods than his own ; there are certain expressions which he may and may not use in his conversation — these and many other laws he must always obey. If he does not obey the rules of his caste, he becomes an outcast. This is the most terrible thing which can happen to a Hindu. He is forever disgraced. His family and friends will have nothing more to do with him. Even the village washerman will refuse to wash his clothes, the potter to make his jars, the barber to shave him, and he himself can do only the lowest kind of work.

Since the English have introduced into the cities of India modern improvements, such as the common water supply, the street cars, and railroads, it is much harder for a Hindu to live according to the rules of caste, and they are slowly becoming less strict. In the smaller places in the interior of the country, however, a Hindu's whole life is regulated by the rules of his caste, which he must follow or be forever disgraced.

The more you read about India the more strongly you will feel that Rudyard Kipling was right when he said, in the poem which was quoted in another place, that the

East and the West can never meet in complete understanding of each other. We may touch in trade, in commerce, in manufacturing, in the common things of daily life, but the people of Western nations have as yet made little progress in really understanding the Hindu, in comprehending the motives, thoughts, and feelings which make him the puzzle that he is.

### TOPICS. FOR STUDY

#### I

1. The cotton industry of India.
2. Jute manufacture.
3. Poppy fields and opium factories.
4. Uses of the poppy.
5. The making of indigo.
6. A legend of tea.
7. The tea industry of India.
8. Other farms in India.
9. Caste.

#### II

1. Write a list of the products of India.
2. Compare the cotton industry with that of the United States. Name some of the most important cotton ports in the United States; some of the most important cotton-manufacturing cities.
3. Send a cargo of jute from India to Scotland. Name the waters sailed on, and the shipping and receiving ports. From the scale of your maps estimate, as near as you can, the distance between the two cities.
4. What country of South America do you think will use the most jute bagging? Give reasons for your answer.
5. What was said about the opium traffic in Chapter III?
6. Name as many differences as possible between the sugar industry in the United States and in India.

7. What are the principal sugar-producing states in our country? Sketch them and locate their chief seaports.

8. Give some reasons why you would not like to live in India.

9. Describe the processes in the preparation of tea.

### III

Be able to spell and pronounce the following names. Locate each place and tell what was said of it in this and in any previous chapter.

England

Scotland

Germany

China

Japan

Assam

Darjeeling

Benares

Bengal

Bombay

Calcutta

Dundee

## CHAPTER XV

### CEYLON, THE PEARL OF INDIA

The island of Ceylon looks very small on the map of Asia, but it is really three times the size of Massachusetts, and is separated from the mainland by a strait fifty miles wide. The island is not a part of the Indian Empire, but is governed directly from England by a governor appointed by the king. Because of its products and its location Ceylon is an important colony. It lies on the ocean route of steamers sailing to and from China, Japan, the Straits Settlements, Australia, and Calcutta.

Have you noticed how England's route to India is protected by strong outposts? First on the way is Gibraltar, at the mouth of the Mediterranean Sea; then comes Aden, at the other end of the long stretch of inland waters; Ceylon lies near the toe of India; and Singapore is at the end of the peninsula farther east. These are the most important stations, and between these are others of lesser importance.

We will land at Colombo, the largest city of Ceylon and the most important seaport. It is about a thousand miles from Bombay and more than seven thousand miles from England. We notice the lovely shore fringed with tall coconut palms overhanging the yellow sands, and the fine break-water which the government has built to improve the harbor. A large hotel is situated a little way from the landing, but in walking even this short distance we shall

feel the effect of the tropical sun and shall be glad of the protection of an umbrella. Our bags are carried up from the wharf in a cart drawn by a bullock, which increases its pace whenever the driver gives its tail a sudden twist.



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FIG. 129. THE SHORE OF CEYLON IS FRINGED WITH PALMS

Horses do not thrive in Ceylon, and oxen and bullocks are used almost entirely. Elephants also are found on the island, and because of their great strength they can do an enormous amount of work. They require so much food that they are expensive animals to keep, and few of the poorer natives can afford to own them.



The part of Colombo occupied by fine residences and official buildings is called the Fort. The portion where the natives live is called the Black Town. The Fort contains



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**FIG. 130. THE PART OF COLOMBO OCCUPIED BY FINE RESIDENCES AND OFFICIAL BUILDINGS IS CALLED THE FORT**

public buildings, stores, and well-built bungalows with deep verandas along wide, shaded streets. The houses, surrounded by honeysuckle, jasmine, azaleas, oleanders, lilies, cacti, and ferns are very attractive. Shade from the

scorching sun is given by the ever-present palms, the long-leaved bananas, the mangoes, and other trees.

The houses in the Black Town are little one-story cabins made of mud spread on bamboo framework, with thatched roofs of palm leaves. Many of them have no windows,



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FIG. 131. THE PART OF COLOMBO WHERE THE NATIVES LIVE IS CALLED THE BLACK TOWN

but the door is never shut, and as the huts are used only as sleeping places, windows are not so important as they are in colder climates. All the family life is carried on out of doors. The natives of Ceylon see no necessity for working hard; they think it far pleasanter to lie in the shade of a mango-tree and chew betel nuts than to labor all day in the intense heat on tea or coffee plantations.

The making of their clothing takes but little time, as the children often go naked and a few yards of cloth draped around the shoulders and waist is an entire costume for a man or woman. Their food is easily supplied; the palm and banana trees yield their fruit, the little farms their rice, and the surrounding waters their fish. Perhaps if we lived in a similar climate and had as few wants to satisfy, we might not be very energetic.

Let us take a train and see something of the island. Are you surprised to know that there are railroads in Ceylon? There are several hundred miles of track, and as we ride over it we shall see queer sights from the car windows.

The city of Kandy, one of the ancient capitals of Ceylon, lies near the center of the island, about seventy miles north-east of Colombo. The little stations on the way are neat, and the grounds are ornamented with trees and flowering plants. What big black eyes the children have, and how earnestly they plead with us to buy some fruit from their tempting baskets held up under the windows!

Soon we are off again into the dense growth of the forest. We should need an ax to clear the way before we could walk through the jungle. The trees are bound together with stout vines, and the ground is hidden by the thick undergrowth. Soon we come to a clearing where we can see some rice plantations in the distance and nearer to us a little village. The houses have bamboo frames filled in with clay, and palm-thatched roofs so low that the eaves are only three or four feet from the ground. No nails are used in building the houses, but the hollow stems are tied together with bamboo fiber or with some strong vines. On we go past banana groves bending under the weight of the

heavy fruit, under spreading banyan trees filled with chattering monkeys, past ant hills nearly as tall as the houses, beside dark pools covered with fragrant lotus flowers and guarded by brilliant flamingos standing on the banks like one-legged sentinels. If we should leave the train and plunge into the thicket, we should find tracks of leopards and bears, and broad paths made by elephants.

To the worshipers of Buddha, Kandy is a holy city, and temples and gods and priests are as numerous as the gorgeous butterflies which delight our eyes. In the center of the city lies a beautiful lake, around which the English have built a charming driveway and promenade shaded with fine trees and ornamented with lovely plants and shrubs. The lake is one of the many artificial ones made centuries ago in order that water might be stored and used to irrigate the rice fields.

The history of Ceylon dates back for hundreds of years. There are temples, palaces, tombs, and ruined cities which tell us that even before the time of Christ the island was rich and populous. Perhaps the most wonderful work of these ancient people was the planning and building of a great system of irrigation. By damming the mountain streams, in which, during the monsoon season, great quantities of water run to waste, large lakes were formed. To feed the thirsty fields the water was brought from these mountain lakes through thick forests and dense jungles, across deep ravines, and around intervening hills. Thousands of rice fields were flooded, and food for the populous cities and towns was thus easily supplied. Now most of the tanks and canals are in ruins, the cities are a crumbling mass of brick and stone, and the gay, happy, indolent people have long since disappeared.

But, you ask, what about the present inhabitants of Ceylon? What do they do? How do they live? What do we buy from them? Next to England we are Ceylon's best customer, and millions of dollars' worth of goods come to us from this far-away island. One of the products which



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FIG. 132. WHEN RIPE THE COCONUTS FALL TO THE GROUND OR ARE PICKED BY NATIVES

we buy in large quantities is coconut, both the dried fruit and the oil. The coconut tree is one of the most useful in the world. The leaves are used for the thatching of roofs and the making of mats. As for the nuts, there is no part that is not used by the natives in some way. The hard shells serve for cups, ladles, and other household utensils; the

husks are made into coarse brushes, brooms, mats, and ropes; the meat is used for food and the liquid inside the nut makes a healthful drink. The dried meat of the coconut, called copra, is exported in great quantities to Europe and the United States, where it is ground and pressed to extract the oil, the most valuable product of the nut. The oil is used as a lubricant and a medicine, and in the making of soap. In the French city of Marseille alone thousands of tons of oil are extracted each year to meet the world's demand. The natives of Ceylon extract the oil from the meat of the coconut in a very crude way and use it to light their homes and to cook their food.

The coconut begins to bear when seven or eight years old, and for nearly a hundred years produces every season from fifty to a hundred nuts. The nuts grow in bunches close to the trunk. When ripe they fall to the ground or are picked by natives, who show much skill in climbing the tall, smooth trunk. It would hardly be safe for you to take a nap under a coconut tree when the fruit is ripe, as a blow on the head by a falling nut or one thrown down by a mischievous monkey or dropped by a careless picker might cause a serious wound.

One of the spices which make the breezes of Ceylon fragrant is cinnamon, and there are thousands of acres devoted to the cultivation of cinnamon trees. In the summer, when the trees are covered with large white blossoms, the orchards are a pretty sight, but the best time for a visit is in the fall, when the bark is being gathered and the air is filled with the spicy fragrance. The trees would naturally grow to a height of thirty or more feet, but under cultivation they are pruned back so that they are only about ten feet high. The

dried bark which we buy in our grocery stores comes from the small branches, which are cut off and peeled.

Tea is another of our important imports from Ceylon. Think of the hundreds of plantations there must be, and the number of women and children employed in picking



FIG. 133. THE AIR IS FILLED WITH THE SPICY FRAGRANCE OF THE CINNAMON BARK

the leaves, to supply the millions of pounds which this one island sends annually to different nations. Ceylon teas have grown in favor during recent years and are now considered among the best.

Have you ever tasted that bitter medicine, quinine? You probably took as little of it as possible, and you will be surprised to learn that millions of pounds are produced

annually in the East Indies, southern Asia, Ceylon, and South America. In former years most of the quinine used in the United States came from South America. To-day, however, the greater part of the three and a half or four million pounds which we use comes to us through the Netherlands from the island of Java in the East Indies, the most important colonial possession of the Dutch.

Probably you have always thought of Brazil as the great rubber-producing country of the world, and so it is. But the demand for rubber has increased so much in recent years that the industry is growing very rapidly in Eastern countries, and it is possible that in the future they may furnish the greater part of the world's supply. Thousands of acres in Ceylon are being planted each year with rubber trees, and the annual product of rubber has doubled itself for several years in succession.

Did you have a cup of cocoa for your breakfast? Possibly that of which your morning drink was made came from Ceylon, as we buy thousands of dollars' worth from this Eastern island.

Nature has not only made the surface of Ceylon beautiful with trees and flowers, fruits and birds, but she has hidden beautiful things in the ground as well. There are hundreds of quarries where rubies, cat's-eyes, garnets, sapphires, moonstones, and other gems are mined. The moonstones obtained in Ceylon are very lovely, and the natives show great skill in cutting and polishing them. Useful minerals are also obtained in the island. One of the most important of these is graphite, or plumbago, which, mixed with a fine clay, forms the lead in the pencils with which you write. It is used also in making stove blacking, as well as axle



grease and other lubricators. The supply in Ceylon is considered inexhaustible, and in more than four hundred mines men are engaged in bringing to the surface so much of this useful mineral that about a third of the world's supply comes from this English colony.

In your trip through Ceylon it may be difficult for you to distinguish the men from the women. They dress very much alike, and the men wear combs, earrings, and other jewelry. Some of their ornaments are made of tortoise shell, as this is one of the most important products of the island. No well-to-do man considers himself well dressed unless he has a valuable tortoise-shell comb in his hair and perhaps a bracelet or two on each arm.

## TOPICS FOR STUDY

### I

1. Size and government of Ceylon.
2. Colombo, the capital.
3. Life in Ceylon.
4. The ancient city of Kandy.
5. History of Ceylon.
6. Coconut trees.
7. A cinnamon farm.
8. Ceylon tea.
9. Quinine and rubber plantations.
10. Mineral wealth of Ceylon.
11. Tortoise shell.

### II

1. Name the waters between Gibraltar and Aden.
2. Describe a flamingo.
3. Load a vessel at Ceylon with goods for the United States. What will her cargo consist of? Name the shipping and receiving ports and the waters sailed on in the voyage.

4. How many of the gems described in the chapter have you seen? Describe each.
5. Tell some modern inventions which have greatly increased the demand for rubber.
6. Look up Ceylon in the encyclopedia and see what additional facts you can learn about it.
7. In what parts of the United States is plumbago obtained? In what other countries is it found?
8. See what you can find about the manufacture of lead pencils.
9. When studying Chapter XI, were you able to find anything about the pearl industry of Ceylon?

## III

Be able to spell and pronounce the following names. Locate each place and tell what was said of it in this and in any previous chapter.

England  
United States  
Brazil  
East Indies  
Straits Settlements  
Mediterranean Sea  
Gibraltar  
Java

Marseille  
Aden  
Calcutta  
Singapore  
Bombay  
Colombo  
Kandy

## CHAPTER XVI

### BEYOND THE BAY OF BENGAL

Besides India and Ceylon there are other British possessions in Asia which we have not yet seen, and we will cross the Bay of Bengal to explore these and other lands.

On the west the peninsula of India separates the Bay of Bengal from the Arabian Sea. On the east another southward-pointing peninsula, made up of several divisions, separates the bay from the China Sea. This eastern peninsula is a larger country than many people realize. It would contain all of the New England and Middle Atlantic States, all of the Southern states east of the Mississippi River, and Arkansas on the western side, and even then the area would not be entirely covered.

This eastern peninsula is made up of four principal divisions. In the northwestern part Burma, considerably larger than the Middle Atlantic States, is in the hands of the British. Farther south the lower end of the long, narrow Malay Peninsula, together with several small islands and the northern coast of Borneo, are grouped under British protection and are known as the Federated Malay States and the Straits Settlements.

The eastern part of the peninsula, called Indo-China, belongs to France. Between the French possessions and those of the English is the independent country of Siam, a buffer state, across which each nation watches the doings

of the other to see that there is no stealthy creeping into Siamese territory and no pushing forward of boundary lines.

Before entering the country, look again at the map and you will notice that the peninsula has many large rivers, all flowing southward from the northern highlands. The Mekong, which for a long distance separates French territory from Siam, is one of the longest rivers of Asia. All the streams which reach the sea have built large deltas, and most of the people live on these and in the river valleys. Much of the country is covered with forests — real tropical forests with rich hard woods, jungles of creepers and thorny shrubs, and a thick undergrowth of vines. In the dense woods are fierce tigers, huge elephants, poisonous snakes, chattering monkeys, and brilliantly colored parrots. No wonder that before entering the deep shadows of these forests the natives always repeat charms and prayers to guard them from its dangers.

We will sail from Calcutta to Rangoon, the chief port of Burma. The voyage is nearly eight hundred miles long, a distance equal to that from Philadelphia to St. Louis. We steam slowly down the Hugli River, past long lines of mills and factories, between low clay shores where hundreds of brown coolies are engaged in making bricks, and then on between low, palm-covered banks and deep jungles, out into the open water of the bay, which for many miles is colored by the muddy water of the Ganges River.

We are surprised at the city of Rangoon. It is as large as Seattle, Washington. The harbor is crowded with ships, and the wharves are lined with warehouses. Many of these are filled with rice, as not only Burma but the whole of the peninsula is one of the great rice-producing regions of

the world. Everybody eats rice, and every village is surrounded by rice fields. The people raise enough for their own needs and a great deal besides, which they send to



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FIG. 134. EARLY IN DECEMBER THE RICE IS READY FOR REAPING

other countries. They do not have to work hard to do this, for their fields are very fertile. Every year during the rainy season much of the country is flooded, and a

new layer of rich soil is thus spread over the land. The climate is so warm that two, and in some places three, crops are raised annually. Everywhere we go we see rice fields, in every village we visit we hear the women pounding rice, and whenever the natives invite us to join the group squatting on the floor, and to share their meal, we shall be sure to find a big dish of rice occupying the center of the circle. In some sections it is said that even the animals are fed on rice.

After seeing the rice fields and the numerous rice-mills which line the river, we are not surprised to learn that Rangoon is one of the largest rice ports in the world. In the mills we should see the unhusked rice continually flowing in a brown stream between huge cylinders, which are just close enough together and moving just fast enough to rub off the brown coat without breaking the grain. We are more particular about our rice than are these Eastern people; we like it smooth and shiny, not rough and dull. So the stream flows on between other cylinders covered with soft leather, which rubs and polishes the grain until it is white and glossy; but, as we have read, some of its nourishing quality has been lost.

Are you surprised to find such well-paved streets, fine public buildings, parks, boulevards, and street-car lines in this city on the other side of the world? We shall always find these modern improvements in places where any considerable number of Europeans make their homes, but we shall find also the narrow, dirty lanes, the little low houses, the bazaars, and the crowded sections where the natives live.

What is that glittering shaft that rises over the low red roofs and even above the highest palms? It is so tall that

it seems to pierce the sky, and so bright that it dazzles our eyes. Let us take a jinrikisha and ride over to it. It is a famous pagoda of Burma, circular in shape and entirely covered with gold leaf, which shines and glitters in the bright tropical sun. This pagoda is very holy, and thousands of Buddhist pilgrims from every country in the East come every year to worship here.

On the broad terrace from which the golden pagoda rises are hundreds of temples and shrines. Near at hand are booths and stalls where pilgrims buy offerings, sweetmeats, flowers, incense, toys, and candles. Before each statue in the temples are piles of these things, bowls of rice, and other articles which worshipers have placed there.

Burma is often called Pagoda Land, for thousands of these curious buildings are scattered throughout the country. A Burman thinks that if he builds a pagoda, he is sure of eternal happiness. So all over the land are pagodas, small and large, rickety and well built, falling to pieces and in good repair, covered with stucco or, if the builder can afford it, with gold leaf.

There are about one and three-fourths billion people living in the world to-day. Of these every fourth person is a Buddhist and worships Gautama Buddha. The word *Buddha* is only a title meaning "the Wise," and *Gautama* is the real name of the prince who lived six hundred years before Christ. After learning of the sorrow and suffering in the world, Gautama left his father's palace and spent some time in solitude and meditation. After this he wandered over India preaching of love, kindness, thoughtfulness, and other truths which, if practiced, he thought would drive away the unhappiness and pain in the world. The

Buddha's work had a great effect, if we are to judge from the number of his followers, who are found all through the Eastern world. Living in different countries as they do, and separated from one another, their beliefs and their methods of worship vary. Of all Buddhists the Burmese people seem to be the happiest, though this may be owing not so much to their religion as to their dispositions and their lovely country.

Among the most interesting sights in Rangoon are the lumber yards and saw-mills. Most of the lumber that we see there is the famous teakwood, which Burma produces in greater quantity than any other country. We see little teakwood in our country excepting in expensive furniture and carved ornaments. It is one of the most valuable woods in the world. It is very hard and strong and not easily injured by water or insects. The trees grow to such a size that logs sixty feet long and from three to five feet in diameter are obtained from them. Such great logs are very heavy, and elephants are used in the forests and in the lumber yards to move them. Kipling writes about the

Elephants a-pilin' teak  
In the sludgy, squidgy creek.

Let us watch them at work. See that huge beast lift the great log, which must weigh a ton, and carry it across the yard. There is a pair working together. They kneel one at each end of a log which has been squared in the saw-mill, put their long tusks underneath it, and steady it with their trunks while they carry it to the pile of logs by the water. See how carefully they lift and push it into place with their trunks until it lies even with the rest.



The driver sits on the elephant just behind its huge ears and directs it in its labors. Sometimes he talks to it in a language which the elephant seems to understand, sometimes



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FIG. 135. "ELEPHANTS A-PILIN' TEAK IN THE SLUDGY, SQUIDGY CREEK"

he guides it by touching it in different places on the head and neck with a steel-pointed stick which he carries. The elephants are very intelligent and learn quickly to do what is expected of them.

Did you hear that gong? That is the signal to stop work. The elephants know what it means as well as the men do,

and although elephants nearly always move deliberately, they are not slow in dropping their logs and going to dinner.

See those elephants bathing in the river. They spray themselves by filling their trunks and then letting the water fall on their backs and run down over their broad



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FIG. 136. SEE THOSE ELEPHANTS BATHING IN THE RIVER

sides. The huge animals feel the heat keenly, and they are always allowed to rest for some time in the hottest part of the day.

We are surprised at the large numbers of Chinese whom we see in Rangoon. Look at the signs over the shops—"How Wing," "Ah Lone"; it seems almost as if we were in China. There are many Chinese not only in Rangoon but

all through Burma and the other countries of this eastern peninsula. They are the merchants, the manufacturers, the businesspeople, and they are just as thrifty, just as industrious, and just as economical here as in their own land.

Many of the laborers, dock hands, porters, and hired hands on the farms and in the forests, doing the hardest, poorest-paid labor, are the Hindus. Where are the Burmese, you ask, and what do they do? You will find most of them in their homes, on their little farms, cultivating their rice fields and vegetable gardens. Rice and vegetables, with the fruits which the tropical country produces without labor, furnish food for the family. What good will money do a Burman? He wants but a little to buy himself or

his wife a new bright silk robe for the next festival in the temple. His children need little clothing, for until they



FIG. 137. THE CHILDREN NEED LITTLE CLOTHING

are five or six years old they wear only a silver chain with a pendant around their bodies. Their first suit of clothes is only a small strip of cloth, which they fasten around their waists as their parents do.

After the rice is gathered, the Burmese like to go on a picnic or to an entertainment with real actors or with dolls moved by string and wires. This takes place out of doors



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FIG. 138. THE BURMESE LIKE TO  
GO ON PICNICS

and everybody is invited. It may last most of the night; each person brings his own mat to sit on, so that in case he gets tired he can curl down on it and take a nap. When he wakes, the fun is still going on and he can join in it again.

The Burmese are perhaps the happiest people in the world.

It is always summer in their country, and a heavy rainfall insures good crops. If their little houses of bamboo are destroyed by earthquake or fire, as is often the case, it takes but a few hours to build others. If their furniture is burned, what does it matter? A few mats, some bamboo blocks for pillows, and a large dish for cooking rice are easily replaced, or they can live with their neighbors until they can keep house again. They have few cares or worries. Why should they work so hard and get

so tired that they cannot enjoy a good time? So they laugh and chat and smoke and gossip in the sunshine like the gay, happy children of nature that they are.

One thing that the Burmese know how to do and to do well is to raise rice, but — work in the stuffy-mill, in the dark forest, or on the hot docks? No indeed, not they! In Burma, in Siam, in French Indo-China, the development



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FIG. 139. SEE THAT BOAT FULL OF EARTHENWARE JARS AND VESSELS

of the country is due not to the natives but to the hands of the Chinaman and the Indian and to the brains of the Englishman and Frenchman.

The Irrawaddy River, on which Rangoon is situated, is the great highway of Burma and is full of all kinds of craft. See that boat full of earthenware jars and vessels which the potter has poled down to Rangoon. Here and there we see long boats loaded with rice, which has come from the farms farther north to the mills at Rangoon. The

wharves are piled high with hundreds and thousands of bags of rice waiting to be loaded onto the vessels which crowd the harbor.

On the river there are also immense teakwood rafts with thatched huts on them. They have come from such long distances that the raftsmen, before starting, built their



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FIG. 140. ON THE IRRAWADDY RIVER WE SEE TEAKWOOD RAFTS  
WITH THATCHED HUTS ON THEM

little cabins on them and brought along their wives to cook the rice, and their children because they could not be left behind alone.

The teakwood trees are so valuable that the government has set apart as reservations the forests in which they grow, just as the United States government has reserved areas of big trees in California. The privilege of lumbering is

granted to a few companies, who pay a certain sum for every tree they take out of the forests. They are not allowed to choose what trees they shall fell, but are obliged to accept the decision of a government inspector, who goes through the forest and girdles every teak tree which is of a certain size and which stands in such a position that other trees will not be injured by its fall. In the course of some months this girdling, or cutting around the tree through the bark into the wood, kills it, and when it is felled, two or three years after girdling, it is dry, seasoned timber. It is hard work cutting one's way through the jungle to get at these trees, and making the paths through which they are to be drawn to the nearest stream. Elephants are very useful in this work, because they can tear aside vines and shrubs and make their way through thick masses of undergrowth, and can haul logs too heavy for horses or oxen to move.

The number of logs arriving at Rangoon in a year depends on the rainfall of the country. That is strange, is it not? In the rainy season most of the streams of Burma, and of other parts of the peninsula as well, are flooded, and it is only when in flood that many of them are deep and wide enough to float such great logs. The elephants with their drivers often follow streams for some distance, releasing the logs which have caught on snags and putting into the water those which have been cast upon the banks.

Malaria, mosquitoes, snakes, tigers, rains, and heat make lumbering in Burma both unpleasant and dangerous. In going through the jungle you may put up your hand to brush aside a vine which is in the way, only to find a poisonous snake hanging almost in your face. The branches of the trees may be covered with ants whose bite is very painful.

They run up your sleeve, and while you stop to brush them off, a leech may fasten itself to your feet or legs. It clings very tightly, and while you are trying to get rid of it, half a dozen others seize the opportunity to make their way toward some unprotected spot where they can get their fill of blood.

In spite of low water and jams and other difficulties, the logs from the smaller streams finally reach the rivers, where they are made into rafts which are poled slowly down to Rangoon. So long is the time between girdling and felling, and so many are the difficulties in hauling and floating, that it is usually from three to six years after a government inspector has girdled a tree before it reaches the saw-mill.

Not all of the teak from the East is felled in Burma. Some comes also from northern Siam by way of the Salween River and the branches of the Irrawaddy, while a good deal goes also down the Menam River to Bangkok, the capital city of Siam.

Siam is often called the Land of the White Elephant. The Siamese believe that after death the souls of human beings are reborn in animals. People who have led evil lives or who have held lowly positions are born again in some small, repulsive, or poisonous animal, while the good and those of high positions occupy the bodies of higher animals. They think that elephants contain the souls of departed rulers, and these animals are respected accordingly. The so-called white elephants, which, by the way, are usually white only in spots, are held in especial esteem. Some of these are kept at the royal palace in Bangkok, where they are carefully tended and fed.



The king of Siam is the only independent Buddhist ruler in the world, and for an Eastern monarch he is very progressive, owing probably to the fact that he was educated in Europe. Influenced doubtless by his Western training and by the English and French in the countries on either hand, he has started many reforms in Siam and introduced



FIG. 141. SCHOOLS HAVE BEEN ESTABLISHED IN SIAM

many modern improvements. He has built railways and roads, established schools, and tried in many ways to open the resources of his kingdom.

His capital, Bangkok, near the mouth of the Menam River, is nearly twice the size of ours and is the largest city in the peninsula. It is the only really large city in Siam, being not only the capital and the residence of the king

but the chief seaport as well. We should know that Bangkok was a commercial city from the number of vessels anchored in the river. There are large steamers flying the flags of many nations, sailing vessels loaded with teakwood



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FIG. 142. MORE THAN HALF THE POPULATION OF BANGKOK IS SAID TO LIVE ON THE WATER

for America and Europe, steam launches scurrying back and forth, ferryboats plying from bank to bank, scores of rice boats from the farms farther north, long, slender canoes, narrow dugouts, and hundreds of house boats. More than half the population of Bangkok is said to live on the water, and the river is lined for ten miles with their queer homes.

Each house boat is numbered and is moored in its own special place, and the family have to give notice to the authorities if they wish to move to some other place. Many of the dwellers on the house boats are traders; in the early morning they take down the fronts of their little apartments and without more preparation are ready for business. Where do they get their food, you wonder. Look! there comes the cook in his boat. He is squatting before his pot of rice, which is cooking on a little stove before him. For a very small sum anyone can get a hot, nourishing breakfast all cooked. If a family wish to cook their own food, they will have plenty of opportunity to buy the material. All through the early morning, before daylight and after, scores of little boats fill the river. Some of these have come from miles upstream. The Siamese woman has risen long before light, gone to the river to bathe, picked, cleaned, and packed her vegetables for market, and, before the sun has driven the heavy mist from the lowlands, is paddling downstream. She enjoys the crowd, the gossip, and the social time; she makes a good bargain for her produce, and before the sun is too hot she returns up the river to her hut on the bank. During her absence her husband has been smoking or chewing betel nuts while he looked out for the children. He is perfectly willing to remain at home, as he does not like to exert himself very much and he knows that his wife can make a much better trade down the river than he can.

Rivers are the chief highways of Siam as well as of Burma. There are only a few roads between the larger places, and away from these there are only jungle paths two or three feet wide. The rivers, brooks, and canals form a network all over the country, and in the rainy season,

when much of the land is flooded, everybody goes about in boats. Nearly all the villages and farms are on the banks of the streams, and everywhere back of this cultivated strip lie the uninhabited jungles and forests.

If we wish to see the real life of the peninsula, we must get up into the country to these scattered villages, for in



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FIG. 143. LET US VISIT THIS LITTLE VILLAGE NESTLING UNDER THE PALM TREES

Rangoon and Bangkok, and in Saigon, the port of French Indo-China, the natives have mixed so much with foreigners that they have adopted some of their customs.

The best time to go up the river is in December or January, for then the rains are over and the weather is not unbearably hot. For a part of the way

the water is darkened by the overarching trees, which in the evening are illuminated by thousands of fireflies, while at times we glide between bare brown fields, which later will be covered with a green carpet of rice.

Let us visit this little village nestling under the palm trees on the river bank. The people are very friendly; they offer our coolies betel nuts to chew and invite us to climb the ladder to their veranda. The houses, raised on

teakwood posts three or four feet from the ground, look very much alike and are similar to those in Burma. Underneath the buildings we see some hens and a dog picking up the refuse which the people have thrown there. The thatched roof extends some distance beyond the walls and forms a cover for the veranda. Through the open front of the house we can see the room inside, which seems to be empty save for a few mats on the floor. Some matting forms a screen between this room and the kitchen behind. The people spend much of their time on the veranda, and as we are strangers, we shall be entertained there.

Will you have some of the tea which the woman is offering you? I am afraid you will not like it. You are expected to take the leaves, roll them into a ball, and keep this in your cheek until the flavor is gone. The people of northern Siam always use tea in this way, and the ball thrust into the cheek makes them look as if they had a severe toothache or the mumps. Their faces are not very attractive when they smile, for the betel leaf and nut which they chew so constantly causes their gums to shrink and their teeth to turn black. Perhaps they do not like our white teeth any better than we like their black ones. See how inquisitive they are! They like to touch our clothes and our shoes. No doubt we seem very queer to them, for this is an out-of-the-way place and many of the villagers have never seen a foreigner before.

Let us go out into the fields. Look at those buffaloes enjoying their bath in the river. Buffaloes cannot live unless they can spend some of their time in the water; on the farms in the higher, drier regions farther north among the hills we shall find more oxen and bullocks than buffaloes.

Do not go too near the creatures. They are not used to foreigners and do not like them, though they are gentle enough with the farmer and his children. The buffaloes are having an easy time now, but later in the season the owner will fasten a pair of them to his little wooden plow and stir up the soil in the muddy field so that he may plant his rice. In the villages far up the river the neighbors help



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FIG. 144. LOOK AT THOSE BUFFALOES ENJOYING THEIR BATH IN THE RIVER

in planting one another's fields, and manage to have a merry time together in spite of the hard work.

When the rice is ready for harvesting, it is cut with a sickle and hung on frames to dry, in much the same way as hay is dried in western Norway. When dry it is taken to the threshing floor

and stacked. As we walk through the village we can see many of these huge stacks; men and women take large armfuls of the straw and spread it evenly on the hard-beaten ground. See those five buffaloes fastened side by side to one another and to a central post. They walk slowly round and round, tramping out the grain with their heavy feet. What a good time that little naked brown boy who drives them is having! When he wants them to go faster, he hits

them with a bunch of straw or twists the tail of the slowest one. He will not hurt them much, for these people are kind to their animals, which consequently look sleek and fat.

There is a fresh breeze blowing, and the men are winnowing the rice. The wind blows the chaff away, while the rice falls in heaps at their feet. Now they scrape it up in basketfuls and store it in that great round bin, which is made of cane plastered with mud and is raised on posts so that the grain will be kept dry and free from insects. Watch that woman pound some of the rice so that she may cook it for dinner. She puts several handfuls into a hollowed stone which has been worn smooth by many years of pounding. The stick she uses is nearly as tall as she is. You would not be able to pound the rice very long with such a heavy tool, but she seems to do it very easily. Take a peep into the stone mortar. The little brown husks are loosened from the kernel, and though it does not look as smooth and shiny as we are accustomed to see it, it is white and clean. Now she fills a wicker basket and shakes it from side to side with a little toss now and then in such a way as to throw the rice up and catch it again while the bran is blown away.

Later she will cook the rice over a little eharcoal fire, and then the men will sit in a circle around the dish and help themselves, using banana leaves for plates. They roll a little at a time into a ball with their curry and eat it with a relish. Every now and then they take from another dish a piece of dried fish, a little curry, or some spicy sauce which serves as a flavoring for the rice. While the men smoke or chew betel leaf with the nut, the women and girls will eat what is left. There are no dishes to wash, no table to clear off, and no food to put away.

To-night the farmer whose rice is all threshed will give an entertainment and everybody will go. The children will listen and look on for a while and then go to sleep under



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**FIG. 145. YOU WOULD NOT BE ABLE TO POUND RICE VERY LONG WITH SUCH A HEAVY TOOL**

the stars with their heads on their mothers' knees. If we go we can stay as long as we like, take a nap if we wish when we are tired, and leave when we please.



There is much more rice raised in this village than the people will need, so the men are loading the narrow dug-outs down in the river, and to-morrow they or their wives will start on their long journey to the rice-mills at Bangkok. If they get a good price for the rice, they will bring back some gay-colored cotton cloth for their dresses, a silver anklet for one of the children, or perhaps a new copper vessel to cook the rice in.

Our next visit is to the island kingdom of Japan, and on our way we will stop at Singapore. This city is splendidly located on a little island at the extreme southern end of the peninsula of Malakka, on the great ocean route to China and Japan. It is the doorway to the East. Every vessel sailing through the Strait of Malakka stops at Singapore, as it is about halfway between China and Australia and halfway between India and China. It is the most important outpost of England between Ceylon and Hongkong, and is one of the great commercial cities of the world. Should you like to peep into the holds of the thousands of vessels which enter and leave its harbor every year, and into the great warehouses which line the water front, and see what they contain, or visit the merchants in the fine business blocks and see what goods they handle and in what their wealth consists?

Let me tell you some of these products. Most important of all is tin. More than half the world's supply comes from the Malay States, and great quantities besides from the neighboring island of Java. You will probably guess that rice ranks next in value. If we should try to store in great warehouses all the rice that is shipped annually from the harbor of Singapore, we should need a row of

buildings each one hundred feet long, one hundred feet wide, and one hundred feet high, stretching for a third of a mile along the water front.

Another product which we shall find stored in the warehouses in Singapore and in the holds of the vessels in the harbor is rubber. There was never such a boom in any other industry in the history of the peninsula. In less than ten years the amount of rubber exported increased more than a thousand times. Dozens of great companies have been formed, and on their large plantations millions of trees have been planted. These trees are tapped and the milky sap prepared for market by the most modern methods. It is of little use to tell how many million pounds are thus produced annually, as in a year or two this amount may be more than doubled. Many people think that in the future the chief source of the world's supply of rubber may be in these Eastern lands rather than in the Amazon valley.

Let us take a short trip into the Malay States and visit some of the famous tin mines. Notice on your map how the mountains on the western part of Siam continue southward and form the backbone of the long, narrow peninsula. It is in these mountains that tin is obtained.

In the lowlands on the coast and along the streams are the villages and farms which are very similar to those already described in Burma and Siam. The little thatched-roofed houses, raised on posts under the shade of palms and fruit trees, cluster on the shore, with the low rice fields stretching back toward the jungle. On all sides except the water edge the dark green forest shuts in the little village and extends, perhaps for miles, to the next opening with its cluster of houses and its cultivated fields.

All these inhabited lands were once covered with forests, which have been cleared little by little. The area occupied by the villages, however, is very small compared with the amount of forest land which extends all over the peninsula. Through the deep woods are a few narrow paths matted with leaves and moss. On either side is the dark, impenetrable jungle, tangled with bushes, briers, and vines. Some of the creepers which wind themselves around the large trees have trunks nearly as large as your body, and so closely do they twist themselves around the forest giants that, when a tree is cut, it often remains standing upright, unable to fall.

As we make our way northward toward the tin mines we shall pass many pepper plantations. Here is one in the clearing before us. The plants are great climbers and twine over tall poles, reminding us of the hop vines which we saw in Germany. It is a pretty sight. The vines are covered with spikes of red berries about as large as peas, which, when fully ripe, are nearly black.

See the men on ladders, picking the clusters of berries. Others are cleaning them, while still others are spreading them in bamboo baskets to dry in the sun. These will be used for black pepper. If the farmer is to make white pepper from his berries, he allows them to remain on the vines until they are fully ripe. After they are gathered they are soaked in water, and then the workmen rub off the dark outer coverings and dry the berries in the sun.

Here we are at the mines. Are you expecting to see a deep shaft with elevators running up and down, and to go hundreds of feet down in the earth to see the miners at work, as you would in a coal mine? If so, you will be very

much surprised at most of the Malay tin mines. At the place we are visiting all we can see is a great hole in the ground, which looks a little as if it might be intended for the cellar of a large building. See those Chinese laborers carrying out of the mine the soil which other workmen have been spading loose. Each one has a heavy basket full of dirt at either end of a long bamboo pole which is balanced on the shoulder. The ladder on which they come up from the pit is a huge tree trunk with rough steps cut in it. I doubt if you could keep your balance on it even if you had no load to carry, but the coolies with their heavy baskets run up and down without trouble, never slipping or falling. Other coolies throw this dirt which has been brought out of the pit into long, narrow troughs through which water is flowing. One or two men rake the dirt slowly back and forth as it is thrown in, and the ore, which is heavy, sinks to the bottom of the trough, while the soil is carried out with the water. Some of the ore is taken to charcoal furnaces near by to be smelted, but more is put into bags and carried to the great smelting works at Singapore.

We have wandered long enough in the tropical forests, jungle lands, and crowded cities of southern Asia. They are unhealthy places even for the natives, and much more so for foreigners who are not accustomed to such great heat. We shall be glad to leave the heat, the dirt, the unattractive houses, and the betel-chewing people for the balmy breezes, the neat, simple homes, and the clean, dainty inhabitants of the Land of the Rising Sun.

## TOPICS FOR STUDY

## I

1. Size and divisions of the eastern peninsula of southern Asia.
2. Surface and drainage.
3. Description of Rangoon.
4. The rice industry.
5. Gautama Buddha.
6. Teak trees and elephants.
7. Life in Burma.
8. The Irrawaddy River.
9. The Land of the White Elephant.
10. Bangkok, the capital of Siam.
11. Siamese villages and farms.
12. The Malay Peninsula.
13. The city of Singapore.
14. Malakkan villages.
15. Pepper plantations.
16. A visit to a tin mine.

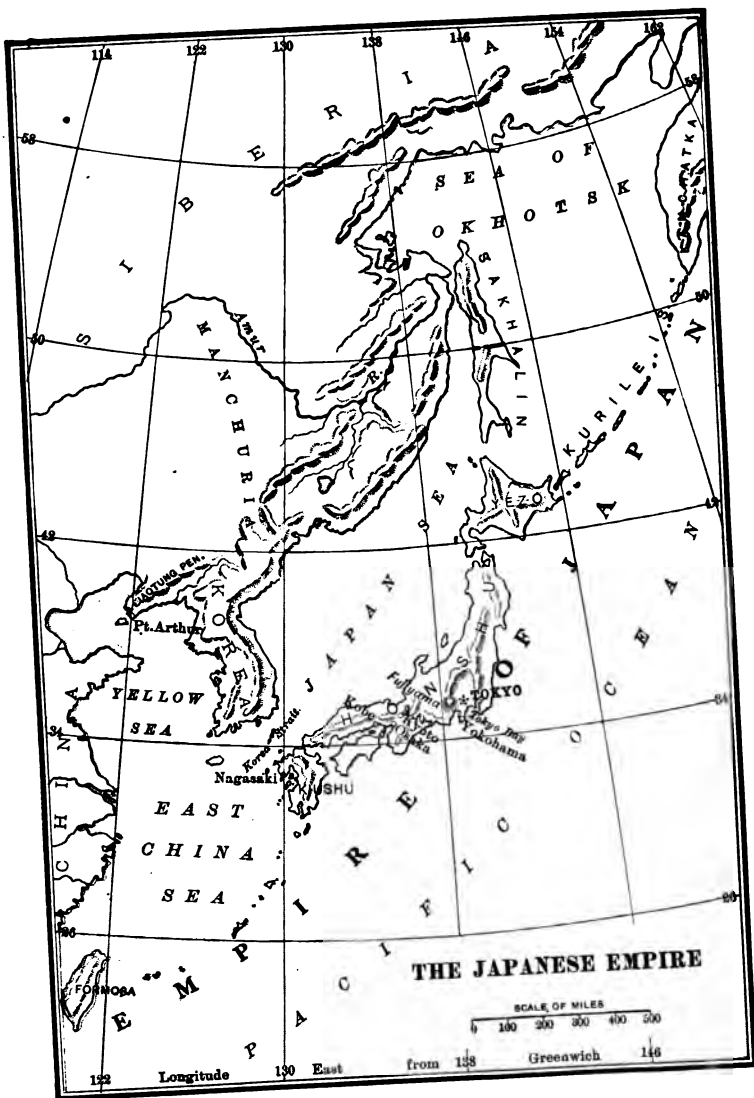
## II

1. Make a list of the large rivers of Asia that flow south. Beside each one write the name of a river of about the same length in some other continent.
2. Sketch a map of the peninsula east of India. Show the surrounding waters and countries. Write the names of the different divisions included in the peninsula.
3. In each division of the above map write the name of one or more states of our country which cover about the same area.
4. In an outline map locate the four largest cities of the peninsula. Beside each one write the name of a city in the United States of about the same size.
5. Compare methods of lumbering in the United States and in Burma. Make a list of the differences in the carrying on of this industry.
6. Make a list of the foreign possessions of Great Britain. How many of these are in Asia?

## III

Be able to spell and pronounce the following names. Locate each place and tell what was said of it in this and in any previous chapter.

Bay of Bengal	Indo-China
Arabian Sea	Siam
China Sea	Borneo
Strait of Malakka	Bangkok
Mekong River	Saigon
Hugli River	Singapore
Ganges River	Calcutta
Irrawaddy River	Antwerp
Menam River	London
Mississippi River	Hamburg
Amazon River	Philadelphia
Ceylon	St. Louis
Malay Peninsula	Seattle
Straits Settlements	Rangoon
Burma	Hongkong







## CHAPTER XVII

### LAND OF THE RISING SUN

We shall find our trip to Japan a very interesting one. It will be a relief to see clean people, to visit clean houses, and to walk in clean streets. We shall enjoy being with people who are so polite. No matter what funny mistakes we may make because we do not know their customs, they will be much too courteous to make us uncomfortable by laughing. They are gentle and kind to one another also, and we shall see little rude or rough behavior among them.



The girls do not complain because they

FIG. 146. IT WILL BE A RELIEF TO SEE  
CLEAN PEOPLE

have to carry a little brother or sister on their backs during play hours; the boys playing on the streets do not quarrel or fight; and if you could understand their conversation, you would never hear one of them swear. All through our trip we shall be surrounded by happy people and smiling faces, for from the time they can understand anything, the Japanese are taught to hide their troubles with a smile.

If they have sorrow, that is no reason why they should make people around them unhappy. At the time of the Japanese wars with China and Russia, when the soldiers



FIG. 147. THE GIRLS CARRY A LITTLE BROTHER OR SISTER ON THEIR BACKS

were leaving for the front, there were few tears shed. The women kept their brave smiles on their faces until they could give way to their sorrow in private, when no one would be disturbed by their unhappiness.

We are especially interested in our island neighbor across the Pacific, because we have more to do with her than with any other Asiatic country. We buy large quantities of goods from Japan, and we send her a great deal in return. As we visit the farms and the factories and

see what the people produce and what their needs are, we shall learn what are the cargoes of the vessels which ply between our Pacific ports and Yokohama.

We shall doubtless make mistakes in our visit to the Japanese, for they do so many things in just the opposite way from that to which we are accustomed. When we enter their houses we must take off our shoes as well as our hats; when we read their books we must begin at what would be our last page and read backwards; if we should build a house there, we should put our garden behind it instead of in front; we should first make the roof and then raise it to its position; we should have no cellar, no attic, no glass for the windows, no hinges for the doors, no paint for the walls, and no chairs, beds, or tables.

When we leave the Malay States we are a long way from Japan. The distance from Singapore to Yokohama is as far as from New York to London. We may like to make the journey less tiresome by stopping at Nagasaki, one of the most important ports in the southern part of the Japanese empire. It has a beautiful harbor — a deep inlet surrounded by steep hills green with forests of maple, oak, and camphor trees. Down near the water we see smoky steel works and immense coal yards. Rich coal deposits lie near the city of Nagasaki, and it is more noted as a coaling station than for its manufactures, though these are important.

As we still have several hundred miles to go before we arrive at Yokohama, we will take on coal here. See the coal barges out in the harbor steaming slowly alongside our ship. The little brown workmen run ladders up the ship's side, and Japanese women mount the ladders until one is standing on each round. Now a man on the barge passes a basket of coal to the first woman, who with a quick, strong motion swings it up to the one on the round

above her. She passes it to the next one, and she to the next, and so on until the baskets are coming up from the barge in quick succession. It seems queer, does it not, to see women doing this hard work? They do not seem to mind it, however, and as they raise the heavy baskets they chatter and laugh with the cheerfulness which seems so natural to these little people.

Nagasaki is situated on the island of Kiushu, the most southern of the five large islands which make up the greater part of the Japanese empire. Honshu, farther north, is the largest and most thickly settled. Most of the people live within a few degrees north or south of Yokohama. So, after taking on coal at Nagasaki, we will steam on to this more northerly port.

Look at your map and see for what a long distance north and south the empire of Japan extends. The possessions farthest north are the Kurile Islands (just south of the peninsula of Kamchatka) and the southern half of Sakhalin Island, while Formosa reaches beyond the tropic of Cancer. If the Japan Islands lay along the coast of North America, they would stretch from about the northern boundary of the United States to the latitude of the city of Mexico. Because of the great length of the empire the climate is very different in the northern and southern parts. Sakhalin, the Kurile Islands, Yezo, and northern Honshu have cold winters and much ice and snow, and the few people who live in this part of the empire differ in their manner of life from those who enjoy the milder climate of the more southerly regions.

The Ainus, who live in Yezo and the Kurile Islands, are to Japan what the American Indians are to the United States.



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**FIG. 148. IT SEEMS QUEER TO SEE WOMEN DOING SUCH HARD WORK  
AS COALING A VESSEL**

They are the descendants of the natives whom the Japanese have pushed farther and farther north as they spread over the country. The Ainus are as dirty as the Japanese are clean, and seem slow and dull beside them. They are much taller also, and the men wear thick black hair and beards. The Ainu women, not to be outdone, are tattooed on their upper lips in imitation of mustaches. They live in mean



FIG. 149. THE AINUS USE LONG, NARROW  
DUGOUTS

little villages made up of huts which are thatched not only on the roofs but on the sides as well, and which at a distance resemble a collection of haystacks. The Ainus hunt the bear and deer and catch a good deal of fish, which is one of their principal articles of food. The sight of an Ainu, with his matted

hair and beard, fishing with a long spear in his narrow dug-out makes us think that we have gone back centuries in history and are watching one of the early races of the earth.

In spite of the fact that the Japanese empire stretches so far north and south, it really covers only a small area. You remember reading in Chapter VII that the combined area of all these islands is about that of California, and that into this small country are crowded more than half as many people as in the entire United States. The

islands are largely of volcanic formation, and in parts are so mountainous and so rocky that the land is unfit for cultivation, and hence is unoccupied; so you can imagine how crowded the fertile portions must be. England, to be sure, because of her many great cities, is even more densely populated than Japan, but England is a manufacturing country and has not for many years attempted to feed and clothe her people from her own products. Until recently, however, Japan has been an agricultural nation, and even to-day more than half of her people are farmers. It seems wonderful that, hampered as she is by her small area and her lack of arable land, Japan has been able to feed, clothe, and educate her people and build up an army and navy so strong and well-disciplined that she has defeated in war both China and Russia — nations many times as large as she is.

It is not as an agricultural nation, however, that Japan will be famous in the future. On account of her small area and crowded population she must turn her attention, as indeed she already has, to manufacturing and commerce. Her short, swift rivers furnishing plenty of water power and electricity, her stores of coal, copper, and other minerals, her seaports with their splendid harbors, her favorable situation for importing raw materials, her nearness to the densely populated countries of Asia, just awakening to new needs and desires, and her ambitious, energetic people, will all help her in becoming the manufacturing nation of the East. She has already in her cities many large factories filled with skillful workmen and up-to-date machinery. We shall visit some of these and see what goods are being turned out by these friendly little people; we shall see

the farms also where some of the material is raised which is used in these factories; we shall visit the seaports and see what goods are stored in the warehouses, and what freight the great vessels anchored in the harbors have brought to Japan, and what is being stored in their holds to carry to other nations.

So, without stopping to talk longer of the people and their queer customs, we will start on our trip through the country and learn many things as we go.

### TOPICS FOR STUDY

#### I

1. Japanese character.
2. Relations with the United States.
3. Queer Japanese customs.
4. Nagasaki.
5. Extent of the Japanese empire.
6. Climate of Japan.
7. The Ainus of northern Japan.
8. Area and population.
9. The future of the Land of the Rising Sun.

#### II

1. Describe the route from New York to Yokohama. How long is the land trip? the water trip?
2. What is the width of the Pacific Ocean? Compare this with that of the Atlantic. How much longer would it take to cross the Pacific than the Atlantic?
3. Describe the route from London to Yokohama.
4. How will the opening of the Panama Canal affect the trade routes to Japan?
5. Make a sketch of the Japanese empire. Write the names of the neighboring waters and countries. Write the names of the five large islands. Show the tropic of Cancer.



6. Sketch the Pacific Ocean. Show the chief seaports of America and Asia. Trace the course of the Japan current.

7. Describe the effect of the Japan current on the temperature and rainfall of western North America.

8. What lands would be affected by the Japan current, and in what way if the prevailing winds of the temperate zone were easterly instead of westerly?

9. Find the density of population of the following countries: the United States, Japan, England, Belgium, Germany, Russia. What do you infer as to the chief occupations?

### III

Be able to spell and pronounce the following names. Locate each place and tell what was said of it in this and in any previous chapter.

United States

Russia

China

England

California

Kiushu

Kurile Islands

Sakhalin

Kamchatka

Honshu

Formosa

Yezo

Yokohama

Nagasaki

Singapore

Mexico City

## CHAPTER XVIII

### CITY AND COUNTRY LIFE IN JAPAN

About midway on the eastern coast of Honshu, the largest of the Japan Islands, we enter Tokyo Bay, and from our vessel we get our first view of Fujiyama, the mountain so often shown in Japanese pictures. It is very beautiful, and it is no wonder that the people love to paint it. The Japan Islands form part of a great volcanic belt which stretches along the Pacific shores of Asia, and Fujiyama is a volcano which, during its early life, had several eruptions, none of which destroyed its perfect cone shape. It wears its white snow cap all the year except during the hottest months. If we could take time to climb it, we should not find the way lonely, for thousands of pilgrims climb to its summit every year.

We are somewhat disappointed in our first impression of Yokohama. Is it really a Japanese city? The great warehouses, docks, street cars, and electric lights seem very modern and very much like what we might see in other parts of the world. Yokohama is one of the most progressive of Japanese cities. Being one of the chief commercial ports, it has a close relation with foreigners and foreign countries, and has a greater number of foreign residents than any other Japanese city. Shall we ride from the wharf to the hotel? If we do we shall surely realize that we are in Japan, as in no other country shall we find such numbers of jinrikishas.

How queer it seems to ride in one! We feel at first as if everyone we meet were laughing at us. But as nearly everyone else who is riding is using the same kind of conveyance, we soon become accustomed to it and are ready to look about us and see what we can learn about this island empire.



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FIG. 150. WE GET OUR FIRST VIEW OF FUJIYAMA.

Do you get the odor of tea in the air? It comes from those great warehouses with the heavy iron shutters. We can hear the hum of voices, and through the open doorways we can see scores of men and women at work over the tea leaves. The tea has been cured once in the villages from

which it came, but if it were sent away in the condition in which it is brought to Yokohama, it would not keep well during the long ocean voyage; so the merchants in the city refire it, after which it is packed and sent to European and American ports.

Could we peep into those other "go-downs," as the foreign merchants in China and Japan call their warehouses, we should see hundreds of bales of raw silk waiting to be stored in vessels bound for Marseille, New York, and other cities. There are also thousands of yards of silk cloth, which will later be shown in the shop windows in dozens of European cities or displayed on the counters of stores scattered through our own country. Immense quantities of silk are shipped from Yokohama all over the world, but to the United States more than anywhere else, as we are Japan's best customer, buying each year from this one port many million dollars' worth of raw silk and silk goods.

Let us leave that part of Yokohama which is filled with warehouses, business blocks, offices, banks, and other modern buildings and go into the real Japanese part of the city. The interpreter at the hotel gives the necessary directions to our runner, and away we go. How narrow the streets are and how crowded with people! Our "man-horse" shouts *hai-hai* at the throng before him whenever the street seems especially full, and somehow a way opens for us through the crowd.

Much of the freight is carried on the backs or hangs from the shoulders of coolies, and there are few teams larger than the little jinrikishas. Wide streets, therefore, have not been especially needed until recently, since electric cars and carriages have come into use. Whenever the buildings in a certain section are destroyed by fire, those which take

their places are set farther back. You think, perhaps, that it will take a long time to widen all the city streets if nothing is done until a fire removes the old buildings; but Japan is not America, and fires are much more frequent there than here. The buildings, you must remember,



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**FIG. 151. HOW NARROW THE STREETS ARE AND HOW CROWDED WITH PEOPLE**

are of wood, and the older ones have thatched roofs. The people use cheap lamps or candles, and their cooking is done in open boxes, not in tight stoves like ours. Here is a fire station before us. It is not a substantial building such as we have, but consists only of a tall ladder with a little box at the top in which a man sits. The houses in the city are

all low, and from his high perch the watchman can easily see over a wide area. Now he catches sight of a suspicious-looking column of smoke off at the right, which in an instant bursts into flame. Let us wait for the alarm and see where the fire is. *'Clang!'* goes the bell; then silence. That one ring means that the fire is in a distant part of the city. If it were nearer he would ring twice or three times, and if



FIG. 152. THE PARTITIONS ARE ONLY SLID-  
ING SCREENS, WHICH DURING THE DAY ARE  
PUSHED ASIDE, THUS MAKING ONE LARGE  
ROOM OF SEVERAL SMALL ONES

it were close to his box the bell would ring, *Ding, dong! Ding, dong! Ding, dong!* as fast as possible. When these light wooden buildings get to burning, there is not much to be done except to try to keep the fire from spreading farther, but with the houses crowded so close together this is not always

easy, and often large areas are burned in a short time.

Perhaps you wonder why people do not build fireproof buildings of brick or stone. The danger would then be all the greater, not from fire, to be sure, but from earthquakes. Remember that you are in volcano land, and where active volcanoes are situated, earthquakes are sure to be frequent. Indeed, in parts of Japan shocks take place every day. Many of these are so slight as to be detected only by the

instruments made to record them, but some are heavy and make the flimsy little one-story houses sway and rock. They seldom fall except in severe shocks, and when they do, the light timbers of which they are made do not injure anyone as seriously as heavy brick or stone would. Buildings of these heavy materials would also be much more expensive to replace.

Most of the houses are one story high, with no chimneys or doors or windows such as we have. In warm weather the houses are open from front to back, so that we can see the quaint little gardens in the rear. Two of the sides of a Japanese house are of plaster similar to ours, but the



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FIG. 153. THE FLOORS ARE COVERED WITH CLEAN MATS FITTED CLOSE TOGETHER

other two are usually of sliding frames which move in grooves. During the day these frames are pushed back out of the way, leaving the house open to the fresh air and sunshine. It would seem queer, would it not, to have two whole sides of your house taken away? You would find it very convenient to have your house so arranged that you could have a whole floor made into one big room, or, if you wished, divide it into two, three, or even more smaller

ones. That is the way the Japanese do. Their partitions are only sliding screens, which during the day are pushed aside, thus making one large room; at night they are put back into place and several cozy bedrooms are formed.

The floors too look queer to us. They are entirely covered with clean mats fitted close together. The mats



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FIG. 154. JAPANESE SCHOOL CHILDREN  
LEAVE THEIR SHOES OUT OF DOORS

are always the same size, six feet by three, and if you should ask a Japanese boy how large his room was, he would tell you that it was a two-mat, or a four-mat, or a five-mat room, as the case might be.

The people living in the house would no sooner think of walking over these clean, dainty mats in their shoes than

you would of stepping on the top of your piano or on your polished oak or mahogany table. The shoes of the Japanese are fastened only at the toes and can easily be slipped on and off, and they are always left outside the door. The floors of shops are often raised a foot or more, so that customers can sit on the edge, with their feet on the ground.

At first sight a Japanese room would seem bare to our Western eyes. There are no chairs, tables, or beds; the



walls are not hung with pictures; and there are no mantles filled with vases, photographs, or other ornaments. There may be one fine picture on the wall, and beneath it a vase containing one or two lovely sprays of flowers. The owner of the house may possess many beautiful ornaments, but only a few are displayed at a time. The rest are stored in a fireproof building near his home or, in the case of poorer families, in a chest which can be easily removed from the house in case of fire. Where do the people eat and sleep, you ask. If you were visiting at mealtime in a Japanese house, a little table not much larger than a footstool would be placed before you. Then a dainty little maiden would put on it pretty bowls containing rice and fish, and a little cup of fragrant tea. Though you sit on the floor and eat with chopsticks, you must be as polite as possible and use your best table manners if you would not be outdone by your courteous host.

When bedtime comes you clap your hands to call the maid. She will push the sliding screens into place to give you a room by yourself. Then she will bring a very thick quilt, which she spreads on the floor, some thinner ones to cover you, and a hard, round pillow very different from the soft feather pillow which you use. After sleeping, or trying to sleep, on it all night, you can imagine something of how Rip Van Winkle felt after sleeping in the mountains twenty years. But though your neck may be stiff, your hair is as smooth as when you went to bed the night before. Hairdressing in Japan is a work of time and is done only once a week, and then by a hired hairdresser. So you see it would never do for Japanese ladies to sleep on soft pillows and disarrange their rolls and puffs.

Only eighteen miles by rail from Yokohama is Tokyo, the capital of Japan. This city, the largest in the country, is about the size of Chicago. We shall enjoy not only the visit to the city itself but also the ride from Yokohama. We go through a lovely country, with the blue water on one



FIG. 155. COOLIES ARE PLODDING ALONG WITH HEAVY LOADS ON THEIR BACKS

side and on the other the green hills rising into mountains, with Fujiyama gleaming among them.

The railroad runs nearly parallel with the old highroad, over which in former days all traffic was carried on. We catch glimpses here and there of coolies resting in the shade of tall pine trees, while the passengers in the jinrikishas enjoy the fine view. Other coolies are pushing handcarts piled with

vegetables, carrying buckets suspended from poles over their shoulders, or plodding along with heavy loads on their backs. There are miles of these old roads extending between the principal cities of Japan. They are usually narrow and overarched by trees, the shade of which must be grateful to the perspiring coolies.

Every few minutes we pass little thatched villages with green rice fields lying behind them. The cultivated lands are full of laborers — men, young children, women, and girls, many of whom have babies fastened on their backs. The farms are very small, and most of the work is done by hand, for there is little room for big plows and mowing machines. Every inch is cultivated; even in the mulberry orchards rows of vegetables are planted between the trees, and hedges of mulberry trees sometimes serve as fences. In winter the fields in southern Japan are green with barley or mil-



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FIG. 156. THE DIKES AND DITCHES ARE PUT IN ORDER AND THE GROUND IS FLOODED FOR THE RICE

let. In the spring this grain is reaped, the dikes and ditches are put in order, and the ground is flooded for the rice. All summer this precious crop is watched and weeded and drained and flooded and fertilized. There is not a spare minute for the industrious farmers until the rice is cut and the sheaves hung on fences to dry.

Autumn as well as summer is a busy time. The white, fluffy balls of the cotton plant must be picked and the brown millet tops dried and threshed. The rice must be combed from the stalks and packed in bags to be carried

to the city or put carefully away in the storehouse for the use of the family until the next crop is harvested.

The farmers in Japan raise crops not only on the land but in the water as well. The people eat a great variety of bulbs and roots of water plants, and from the car windows we can see lotus plants and lilies growing in ponds, ditches, and canals.

The inhabitants of Tokyo and Yokohama have no room for vegetable gardens, and on the roads leading to these centers there is a constant procession of farmers carrying their wares to market. Coolies with handcarts, coolies with baskets swinging from poles, and coolies with heavy burdens on their backs are everywhere. Should you like to examine the loads in the carts and peep into the deep baskets? There are beans of all sizes and colors, cucumbers, gourds, egg plants, cabbages, tomatoes, herbs for seasoning, lotus roots, and crisp lily bulbs. In the evening it is like a continuous torchlight procession. Then every jinrikisha and handcart has a bobbing, swaying Japanese lantern, and every person carries one on a pole in his hand.

The ride from Yokohama has been so interesting that we are almost sorry to arrive in Tokyo. But what a beautiful city it is! There are trees everywhere, and on the hills around are lovely residences nestling in the green foliage. Like all Japanese houses these are not very attractive in front, but they open in the rear into lovely gardens as unlike those to which we are accustomed as are the houses. A garden may be only a few yards square or even only a few feet, yet in it you may find a little silvery brook with a waterfall and a bridge shaded by a dwarf pine only a foot or two high. On the side of a tiny hill

near some rough stone steps springs a miniature cherry or plum tree which leans over the little brook and scatters its pink petals into the clear water. Everything is so natural and so well arranged that the garden appears much larger than it really is.

Along some of the streets of Tokyo, especially near the water or in the parks, rows of cherry trees have been planted. You are thinking what a fine time Japanese boys and girls must have when cherry time comes. You will be surprised when I tell you that the fruit is not good to eat, and that both the children and the



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FIG. 157. THE CHILDREN AND GROWN PEOPLE  
LOOK FORWARD TO THE BLOSSOMING TIME

grown people look forward not to the time when the cherries are ready for picking but to the blossoming time.

Can you imagine all the people of Chicago or Boston or Philadelphia having a great holiday when apple trees are in bloom and going in crowds out into the country, or to places in the city where the trees have been planted, to spend the day in the pink and white forest? That is what the Japanese do in cherry-blossom time. They love the dainty flowers and enjoy them as we never think of enjoying

our blossoming trees. The wistaria vine and the plum trees also draw their crowds in springtime, and in the autumn the gorgeous chrysanthemum, the national flower, has its hosts of admirers.

Of course you wish to see the imperial palace, where the emperor lives. The ruler of this strange little country can



FIG. 158. THE WISTARIA VINE IS LOVELY IN THE SPRING

trace his descent in the royal line back for thousands of years — even back to the gods, some of his subjects think, for many of them believe that he is something more than a common man. In former years no Japanese ever dreamed of seeing the emperor. If he passed in a royal procession through the streets, all houses were closed and all the inhabitants kept out of sight. Many of the old customs are

passing away, however, and to-day he is often greeted by cheers as our President is. The emperor's palace is a curious combination of Eastern architecture and Western comfort. It is Japanese in appearance, but it is heated by steam, lighted by electricity, and furnished, in part at least, with European furniture.

Let us take a drive through the city. Though we ride for a long time, we can see but a small part of it, for Tokyo covers a hundred square miles. The crowds, the narrow streets, the shouts of the jinrikisha runners, are much as they were in Yokohama and do not now disturb us. Many of the shops have fine large plate-glass windows and foreign goods displayed behind them. We would rather visit some of the smaller stores on the side streets, where Japanese goods such as the people use are sold. There are many streets where the front room of every house is a tiny shop and the family live in the room behind. There are other streets where there are no shops at all, but just rows of little houses close together and showing, when the sliding screens are drawn together, plain dark walls. If we could look down on the city, we should see, stretching for miles, a sea of gray roofs with here and there the darker roofs and towers of temples rising above them. None of the houses in Tokyo are painted, and the dark slate color of the weatherworn wood gives a dull, somber effect to the city.

Some of these streets are prettier in the evening than in the daytime. Lanterns of every shape and color are hanging in the stores and are carried by many of the people. The streets which are lighted by kerosene lamps seem ugly by comparison, and those where electricity is used, though brighter, are not so picturesque.

How interesting the sights are! In the little open shops we can see umbrella-menders, rice-pounders, lantern-makers, and shoemakers sitting on the floor at their work. Many things are sold in the streets. There comes a flower-seller with boxes gay with blossoms hanging from either end of a bamboo pole. Here is a vegetable peddler crying his wares



FIG. 159. IN THE LITTLE OPEN SHOPS WE CAN SEE LANTERN-MAKERS SITTING ON THE FLOOR AT THEIR WORK

of roots and greens. In our rambles we meet the fish-dealer and the bean-curd man. Beans are raised in great quantities in Japan and are eaten in every form one can think of. Bean oil is used in cooking, in manufacturing soap, and as a lubricator. The substance left after the oil is extracted is pressed into cakes and used as a fertilizer and a cattle food. Every farmer in Japan raises beans, but so great is the



demand that large quantities of beans, bean cake, and bean oil are imported annually from Manchuria.

Let us visit some of the workshops in Tokyo. Here is one where the man is working on some of the beautiful lacquered ware for which Japan is famous. You have seen, have you not, Japanese trays and boxes of shining black decorated with gilt flowers and birds? The varnish which gives such a fine luster is made from the sap of the lacquer tree. This tree grows in the interior of Japan and is tapped in somewhat the same way as the sugar maple is in the United States.

The lacquer finishers are expert workmen. The one whom we are watching uses hard wood of the finest grain. After applying a coat of varnish, he dries it thoroughly for several days. Then he spends a long time in rubbing it down until the wood is as smooth as satin. He applies another coat of lacquer and leaves it to dry while he rubs down and varnishes other articles on which he is working. He often goes over his best pieces twenty or thirty times in this way. The work takes so much time that the really nice lacquered ware is very expensive. Most of the finest work is done in Tokyo and Kyoto, and although there are many workmen in those cities, who take such pride in their work that they will do no pieces except in the old, slow way, with many coats and much polishing, there are also many others who supply the cheaper articles which are in great demand.

Lacquer varnish, when properly applied, will last many years, even when the dishes covered with it are put to the hardest use. The little bowls in which the Japanese serve their hot soup are lacquered; with such use the kind of

varnish used in our country would soon be worn off, but the heat does not affect the lacquer for a long time.

Let us take a short trip into the country around Tokyo. Mulberry trees are everywhere, and in nearly every house we should find some silkworms. Rice fields fill the valleys, and tea shrubs cover the hillsides. Gardens of all kinds of vegetables and fields of wheat, barley, millet, and rape occupy every foot of ground.

Did you know that Japan is one of the most important fishing countries of the world? Nearly two million Japanese are engaged in fishing, some spending their entire time in the occupation, others carrying it on for a part of the year only and working on their farms for the remainder of the time. Great quantities of herring, cod, mackerel, and sardines are caught near the coasts or in the deep ocean waters, and every river, pond, and canal yields its harvest to the industrious Japanese. Oysters, clams, salmon, shrimps, lobsters, turtles, and eels are caught in great numbers and used for food. Immense quantities of seaweed are gathered in the spring and dried; several varieties are eaten, and some are used in the manufacture of glue and some for fertilizers.

Should you like to visit a turtle farm? There are many in Japan, for the flesh of certain kinds is considered a great delicacy. One of the most noted turtle farms, where thousands are raised each year, is situated near Tokyo. As turtles live much of the time in the water, of course there must be several ponds on the farm. These are connected with canals in such a way that the water may be drained off and let on at will. Some of the ponds are for full-grown turtles, some for little ones just hatched, and some

for those half-grown. If all were kept together, the old ones would eat the little ones and few could be raised.

The ponds are surrounded by planks to prevent the turtles from escaping, and the mud banks are kept soft, so that the female may easily dig the hole in which to lay her eggs. When the young turtles make their appearance, they are put into ponds by themselves and fed on finely chopped meat. A turtle farm, if well conducted, is very profitable, and the owner of the one which we are visiting tells us that he sends to market each year more than fifty thousand.

Have you ever owned any goldfish? In Japan we see them everywhere—in the parks and gardens and in the stores for sale. They have been raised here for centuries, and in all parts of Japan we shall find people engaged in breeding them. In some towns near Tokyo, and farther south near the great manufacturing city of Osaka, we shall see goldfish ponds on nearly every farm.

You would probably not recognize young goldfish, for they are dark in color and spotted with black. The breeder must know his work thoroughly and be very careful in regard to the food, water, and temperature, in order that the tiny creatures may early and successfully change their dark coats for the bright ones which make them so popular.

The carp is another fish which, though not so familiar to us, is raised in great numbers in Japan, and hundreds of acres are devoted to this industry. Certain varieties with bright colors are raised for ornament and are found with goldfish in the ponds of parks, gardens, and temples. Others are raised for food, as carp is one of the most popular food fishes in Japan.

As we cross Japan toward Kyoto, the old capital, we find ourselves in the center of the tea district, where the industry is more important than in other parts of the country, though the shrub is grown nearly everywhere. Over the hillsides are scattered hundreds of men, women, and children who work all day picking the young, tender leaves. Centuries ago, when tea was first raised in Japan,



FIG. 160. THEY WORK ALL DAY PICKING THE TENDER LEAVES

the leaves and tender twigs were picked, ground into a powder, and steeped in water. In Japanese museums we can still see the old grinding stones which were used to prepare the powder. The drinking of tea was at first confined to the priests and nobles, and as the years passed by there was a great deal of ceremony connected with its use, and rules were made for its brewing and serving. Every dish must be handled in a certain way and placed in just

the right position before the guest, while each bow and each movement of the body must be performed exactly according to directions. The ceremony finally became so long and so difficult that people fitted themselves to teach it to those who wished to give the time to learn it. In order that their guests might be served in the correct way, many of the higher classes kept in their service, on a regular salary, a master of the ceremony.

A world's fair was held in Chicago in 1893, and all civilized nations sent exhibits of their products and industries. The Japanese prepared an especially fine display of the tea industry, which so impressed people who saw it that the tea trade between Japan and America was greatly increased. We import enough tea each year to give every person in the United States more than a pound apiece. Of this tremendous quantity more than half comes from the little Japanese empire, and the rest from China, the East Indies, India, and Ceylon.

As we are so near Kyoto, we must take a peep at this old capital of Japan. Some one has said that Yokohama is the eye of Japan, Tokyo the brain, and Kyoto the heart. Tokyo represents the modern country, with its ideas of progress and its ambitions, and Kyoto the ancient Japan, with its temples and shrines and palaces. It is a curious combination of old and new. Half of the city is filled with the relics of its old life, — the temples, castles, and other ancient buildings, — while in the other half you are surrounded by workers of the modern industrial nation. Kyoto is noted for its manufacture of fans, dolls, toys, vases, porcelain and chinaware, and embroidery; in one year more than a millón pieces of lacquered ware were

sent out of the city. In the little open shops we can see workmen engaged in making many of these articles. In Kyoto, as in other Japanese cities, workmen hired by a



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**FIG. 161. YOU ARE SURROUNDED BY WORKERS OF THE MODERN INDUSTRIAL NATION**

manufacturer are not always gathered in a great factory, but work by themselves or in small groups in their little houses.

Kyoto is a great center for silk manufacture, and we should find thousands of the people spinning, weaving,

and embroidering the fine fabrics for which the city is famous. Shimmering silks, gold-wrought brocades, figured damasks, and crêpes and velvets embroidered with beautiful designs are made in great quantities in the ancient capital.

Before we leave Japan we must visit Osaka. When I tell you that it is called the Manchester of the East, you will know what to expect in regard to its industries. Though Tokyo is the largest city, Osaka surpasses it in its manufactures. It is situated on a broad plain in the southern part of Honshu, and, because of its numerous rivers, canals, and bridges, might be likened to Amsterdam or Venice. The waterways are full of barges and boats of all kinds taking raw material to the mills and factories, carrying away the finished products, and bringing provisions to the people. Buyers and sellers, packers and carters, clerks and designers, crowd the warehouses, shops, and streets. On one street everyone is at work on umbrellas and fans, another is devoted to porcelain and pottery, and a third to bronze and metal work. The low, red brick mills and factories are as numerous, if not as large, as those in Manchester, England, and the forests of chimneys are topped with clouds of black smoke.

Which shall we visit, a spinning-mill, weaving-mill, paper-mill, flour-mill, rice-mill, iron and steel works, leather factory, electrical works, copper refinery, match factory, or soap factory? In Osaka we shall see all these and many other mills and factories; those where cotton yarns and cotton cloth are made are the most numerous, and the sugar refineries are next in importance. The city is a strange mixture of East and West, of ancient and modern. You can see coolies pounding rice with long poles,

and next door, perhaps, you may find garment workers running American sewing machines. You may watch the movements of an old-fashioned spinning-wheel and near at hand hear the clatter of a modern loom. If Osaka were favorably situated for ocean commerce, it would undoubtedly become the most important of Japanese cities. Unfortunately this is not the case, and a great deal of her foreign commerce is carried on through the city of Kobe. This city is to Osaka what Yokohama is to Tokyo, the port through which raw materials are brought and from which the finished products are shipped away. Much of our trade with Japan is carried on with Kobe. Most of the tea which comes to the United States is shipped from there, and in the holds of the vessels which sail from our Western cities to this Japanese port you will find thousands of bales of raw cotton and an immense assortment of iron and steel articles — nails and rails, pipes and tubes, wire and sheet iron, and machinery of all kinds, for drilling and boring, for paper-making, for electrical purposes, for mining, and for many kinds of manufacturing. There is oil to be used instead of the pretty Japanese lanterns, there are sewing machines to take the place of the handwork, and electric cars to supplant the jinrikisha. There are cans of condensed milk, leather goods, barrels of flour, and railway engines.

In the future we must think of Japan, not as a little island kingdom occupying less than one hundredth of the area of Asia, but as an important, progressive industrial nation which is fast building up an immense trade with the densely populated countries of China, India, and other parts of the East, and with which the United States itself may sometime have to compete in the trade of the Pacific Ocean.



## TOPICS FOR STUDY

## I

1. The opening of Japan.
2. Description of Yokohama.
3. Volcanoes and earthquakes.
4. Japanese homes and home life.
5. From Yokohama to Tokyo.
6. Farming in Japan.
7. Gardens and cherry blossoms.
8. Lacquer trees and lacquered ware.
9. The fishing industry.
10. Kyoto and old Japan.
11. The manufacturing city of Osaka and the port of Kobe.

## II

1. See if you can find any information about Commodore Perry's visit to Japan.
2. Where are there any volcanic areas in North America? How does the position of this region correspond with the volcanic area of Asia?
3. Compare the height of Fujiyama with that of some mountain in the United States.
4. What was said of millet in Chapter III? in Chapter VII?
5. See if you can find the area of the city of London; of New York City. Compare these with the area of Tokyo.
6. What is said in Chapter VII about the bean product of Manchuria?
7. Make a list of five important cities of Japan. Opposite each one write the name of a city in Europe or America of about the same size. In a third column write the names of some in the same latitudes.
8. Name the most important fishing countries of the world.
9. In making a trip to Japan from the United States, at what islands in the Pacific Ocean might your vessel call? To whom do these islands belong? For what are they noted?

## III

Be able to spell and pronounce the following names. Locate each place and tell what was said of it in this and in any previous chapter.

Tokyo Bay

India

China

United States

Manchuria

California

Honshu

Fujiyama

Tokyo

Osaka

Yokohama

Kyoto

Kobe

Manchester

Venice

Amsterdam

Marseille

Chicago

New York City

## CHAPTER XIX

### SILKWORMS AND SILK MANUFACTURES

When we talk about silk, we are speaking of a very old product, for it was known and used many hundred years ago. Three thousand years before Christ the industry was carried on in China, and the empress who is said to have discovered the wonderful power of the silkworm and the value of the thread which it spun is to-day worshiped by the Chinese as the Goddess of Silkworms.

Silk was one of the articles which were carried in early days by overland routes to Europe from the East, and it was to get to the lands which furnished this and other valuable products that Columbus and Vasco da Gama undertook their long voyages across unknown waters.

So far as we know, the Chinese were the first people to make use of silk fiber by weaving it into cloth. For centuries they jealously guarded the secret of its production, and it was considered a crime punishable by death to carry any of the silkworm eggs out of the country. In the year 850 A.D. two Persian monks, leaving China for Constantinople, managed to take some eggs with them without losing their heads for doing so. Each of them carried a long staff made of bamboo, which, as you know, has a hollow stem. This made a fine hiding place in which the eggs were safely taken on their long journey. The monks watched them hatch into caterpillars and saw these spin

their silken cocoons, from which the creamy moths crept out. From the eggs which they laid more caterpillars were hatched, and so the industry grew and finally spread throughout southern Europe.

Less than two hundred years after the birth of Christ a Chinese prince came to Japan, bringing some silkworm eggs with him. He became naturalized as a citizen of Japan and



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FIG. 162. THERE ARE BILLIONS OF  
SILKWORMS IN JAPAN

thereupon settled down and interested himself in raising silkworms. The industry spread; the emperor and empress, seeing that it was well adapted to the people and the country, took every means of encouraging it, for, as one said, "If we do not pursue agriculture, what shall we eat?"

If we do not pluck the mulberry leaves to feed the silkworms, what shall we wear?" What would this same old emperor say if he could revisit his empire to-day and see the thousands of acres of mulberry trees, the billions of silkworms, and the scores of warehouses stored with bales upon bales of the shining, lustrous fiber?

China, Japan, Italy, France, and western and central Asia are the greatest silk-producing regions in the world.



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**FIG. 163. GO AND CUT SOME MULBERRY LEAVES FOR THE SILKWORMS**

The climate in different parts of the United States is well adapted to the raising of mulberry trees and the rearing of silkworms, but we are not and probably never will be a great silk-producing country. After the silkworm has spun its cocoon, the fiber of which it is made has to be reeled off in a long thread. In China, Japan, and Italy this work is usually done by women and children, who are paid less for a month's labor than they would receive in this country in a week. With living expenses as high as they are in the United States, you see that it would be impossible for people to work for such wages, and we can buy silk for our manufactories much cheaper than we can produce it.

If you were a Japanese boy or girl, your mother or father would probably say to you several times a day, "Now go and cut the mulberry leaves for the silkworms." When the little creatures are first hatched, they are very tiny, scarcely an eighth of an inch long. At this time they must be fed with young, tender mulberry leaves chopped very fine. They are greedy little things and need fresh leaves four or five times a day. Three times during their growth they stop eating, take a long sleep, and change their skin, but they make up afterwards for these rest periods by eating more than ever, until, at the end of a month, they are about three inches long. Now they stop eating for good and begin to spin their cocoons, which they fasten onto wisps of straw with which they have been supplied.

The spinning is a curious process. Let us watch one of the worms for a while and see how it works. It moves its head slowly from side to side and spins from its mouth a long, fine, sticky fiber, which catches on the straw and soon surrounds the spinner. In a few hours it is nearly hidden,

and in about three days the cocoon is finished and the worm, now shrunken in length to about an inch, is securely fastened inside.

In its silken prison the worm shrinks and hardens into a brown chrysalis. In a few days this changes into a pretty, cream-white moth, which loosens and breaks the threads at one end of the cocoon and comes out into the light and air. The moths are very feeble creatures which lay their eggs and die in a short time. Only those people who are engaged in the production of silkworm eggs allow the moths to come out of the cocoons. Those who are to sell their cocoons for the fiber of which they are made have to stifle



FIG. 164. LET US STOP AT THIS HOUSE WHERE  
THE LITTLE CHILD IS WATCHING US

the moths inside, so that the thread may not be broken.

We can visit plenty of factories in Tokyo, Osaka, Kyoto, and other cities of Japan, where silk is being reeled, spun, and woven into cloth. We shall enjoy better a visit into the hilly regions in the center of the silk-producing area. Here is an attractive village nestling at the foot of some green hills, down one of which a dashing stream of clear water is rushing toward the filature, as a silk-reeling establishment is called. Here the little river is harnessed and

made to help the women and girls of the village who work there. Japan is a hilly country, and the people have begun to appreciate the benefits of the water power which the streams furnish in such abundance.

The hillsides all around are covered with tea shrubs, and the valleys are green with the velvet carpet of the rice



FIG. 165. THE FARMER KEEPS THE WORMS ON SHALLOW TRAYS ARRANGED ONE ABOVE THE OTHER

plant. We can see large orchards of mulberry trees, and mulberry hedges serve as fences to separate the fields. Every family in the village raises silkworms, and every person is connected in some way with the industry. Let us stop at this house where a dainty little maiden is watching us from between the sliding screens. In some of the homes in the vil-

lage the whole second floor is devoted to the silkworms; in others one room only is used, but it is always sure to be a light, sunny one.

The caterpillars which we see in the nursery are about half-grown and seem lively and hearty. The farmer keeps them on shallow trays arranged one above the other. One of the children has taken down a tray to clean it, and we will watch to see how he does it without disturbing



the worms. He spreads a net over the tray and sprinkles some freshly picked mulberry leaves on it. The worms are hungry, and when they climb up on the netting to get at the leaves, they are carefully lifted, netting and all, onto a clean tray.

Besides the farmer, only the grandmother and the younger children are at home, as the wife and the older



FIG. 166. MOST OF THE WOMEN AND GIRLS OF THE VILLAGES WORK IN THE FILATURE

girls are working in the filature. The grandmother is seated before a hand reel, and as she works she tells us stories of the industry before there were any filatures near the streams in the valleys or any factories in the great cities. Then each family raised caterpillars from eggs which they had saved, reeled off the delicate fiber, spun the glossy thread, and wove the soft fabric in the home as some still do to-day.

We are interested in her tales of the older days, but more so in watching her work. Some cocoons are soaking in a dish of warm water before her, and as she talks she deftly loosens from several of them the ends of the long fiber of which they are made, and with her hand reel winds off the threads, as fine as those of a spider's web, without once



**FIG. 167. YOU ARE WONDERING WHAT IS DONE WITH THE MILLIONS OF POUNDS OF RAW SILK WHICH IS BROUGHT FROM JAPAN**

breaking them. In the filatures hundreds of younger women with their power-driven reels are doing the same thing more quickly and smoothly. To make the thread as it comes to us in the skeins of raw silk the fibers from half a dozen or more cocoons are reeled off in one thread. In a pound of raw silk of the finest quality there is thread enough to stretch across the state of New York from Buffalo to Albany.

Perhaps you are wondering what is done with all the millions of pounds of raw silk which are brought across the ocean every year from Japan, from China, and from Italy to the United States. From it we manufacture a greater amount of silk goods than any other country in the world. Most of this work is carried on in the New England States and in New York, Pennsylvania, and New Jersey. Paterson, New Jersey, is the most important silk-manufacturing city in the United States, and Lyon, France, ranks first in the world in the manufacture of goods from this queen of fibers.

During recent years Japan has increased very rapidly both her output of raw silk and the amount of silk goods manufactured in the empire. The government has established experiment stations, training schools, and egg hatcheries, and is encouraging in every way this industry to which the climate of the country and the skill of the people seem so well adapted. Who knows but in the future the greatest silk-manufacturing centers may be found, as the finest silk-producing region is to-day, in this far-eastern Land of the Rising Sun?



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FIG. 168. WHO KNOWS BUT THAT IN THE FUTURE THE GREATEST SILK-MANUFACTURING CENTERS MAY BE FOUND IN THE LAND OF THE RISING SUN

## TOPICS FOR STUDY

## I

1. History of the silk industry in China.
2. History of the silk industry in Japan.
3. The great silk-producing regions of the world.
4. The United States as a silk-producing country.
5. Life history and care of silkworms.
6. A visit to the silkworm region of Japan.
7. Hand reeling and power reeling.
8. Silk manufacturing in the United States and France.
9. The future of the silk industry.

## II

1. Describe the route of Columbus from his starting place to the land of his first discovery.
2. Describe the route of Vasco da Gama.
3. For what were these men searching? Why did they go in opposite directions?
4. Name some of the silk-producing countries of western and central Asia.
5. Name the waters on which a vessel would sail in bringing raw silk to New York from China; from Italy; from Japan. Name the shipping port in each country.
6. Name some occupations which you think will be important in the future development of Japan. Give the reasons for your choice.

## III

Be able to spell and pronounce the following names. Locate each place and tell what was said of it in this and in any previous chapter.

China	Constantinople
Persia	Tokyo
Japan	Kyoto
India	Osaka
Italy	Buffalo
France	Albany
New England	Paterson
New Jersey	

## CHAPTER XX

### FORMOSA AND KOREA

The area of the Japanese empire has been considerably increased by the addition in recent years of Formosa and Korea. Formosa is more than one and a half times the size of Massachusetts, while more than ten such states could be carved out of Korea. As these lands are thinly peopled, they will afford room for Japanese immigrants, whose products, as the countries develop, will greatly increase Japanese commerce.

When, in 1895, Japan received Formosa from the hands of the Chinese, it seemed like a gift of little value. The island was inhabited chiefly by savage tribes and outlaws from China. There were no laws, no cities, no roads, and no railroads. To make the island a valuable addition to her well-ordered, prosperous empire was a hard problem, but it was not too hard for the energetic, ambitious "Yankees of the East." Immediately they set about their work. Since Formosa has been in her possession, Japan has opened roads, built railroads, made new laws, established schools and hospitals, improved harbors, built irrigation systems, and established a police force to protect the peaceable working people from the wild tribes. The government encourages the natives to settle down and cultivate the soil, giving them seed, land, and tools, and teaching them the best ways of doing their work, while it punishes severely those

who still persist in robbing and plundering. Thousands of Japanese have gone to Formosa and are rapidly developing its resources, which are many and valuable.

Of course the products which the thrifty Japanese would think of first are the two which are so useful in their own land — tea and rice. Does your mother use oolong tea? If so, very likely it came from a Formosan plantation, as we buy annually from Japan several million pounds of oolong tea which was grown in Formosa. Besides the tea and rice farms there are sugar plantations, poppy fields, and, on the shore, large salt works.

The mountains of Formosa extend north and south through the island, and in them are vast deposits of coal, sulphur, and gold, which are being worked more and more each year. The forests which cover the slopes are fully as valuable as the minerals, and Japan will never lack for building material with such a rich supply so near at hand.

Camphor trees grow in great numbers in Formosa, and the island supplies nearly all the world with camphor. Some is produced in China and Japan, but millions of pounds of the gum and oil come from Formosa. The largest camphor forests in the world cover its mountain slopes. The trees, which grow to a great age, are as large as oaks and look somewhat like them, but they are more beautiful, having darker, glossier leaves. Formerly the trees were cut down and chopped into chips, which were boiled to obtain the sap from which camphor is made. Even the immense forests of Formosa would soon have been destroyed by the wasteful methods which the Chinese used. Now, however, the Japanese government has made the camphor industry a government monopoly, and strict

laws are enforced as to the methods by which it shall be carried on. Five trees must be planted for every one which is felled. These are supplied by the government, which in one year distributed several million trees and in some cases also gave the land on which they were to be planted.

Recently it has been found unnecessary to fell the trees to obtain the camphor, as it can be manufactured as well from the leaves and twigs; and now that the Japanese government is supervising the work so closely and this easier way of obtaining the oil has been discovered, there is every reason to think that the industry in Formosa will increase very rapidly.

Camphor is a very important material in the making of celluloid and of powder and other explosives. When the Japanese wars were in progress, great quantities were needed at home in her powder factories, and her commerce was so seriously interfered with that little could be exported. For both of



FIG. 169. THE GLOSSY-GREEN CAMPHOR TREES ARE AS LARGE AS OAKS AND ARE MUCH MORE BEAUTIFUL

these reasons the price of camphor was greatly increased. Then the German chemists stepped in with an artificial article which they had succeeded in making in their laboratories, and few people knew whether they were using the



FIG. 170. THE LEAVES OF THE CAMPHOR TREE ARE A DARK, GLOSSY GREEN; THEY ARE BOILED TO OBTAIN CAMPHOR

vegetable gum or the manufactured product. At that time it was thought that artificial camphor might in time take the place of the Japanese article, but so far it has not done so. In times of peace the natural product can be obtained from Formosa more cheaply than the artificial camphor can be manufactured, and as long as this remains possible, Formosa camphor will form the greater part of the world's supply.

You have read in Chapter VII how the Japanese drove the Russians out of Korea and took possession of the peninsula. Let us take a short trip through the country and see what kind of a land it is which has been added to the Japanese empire.



Korea is shaped much like Florida, but its surface is very different. Heavily wooded mountains extend throughout its entire length, growing lower toward the south and rising in so many scattered islands off the coast that one of the titles formerly given to the emperor of Korea was The Ruler of Ten Thousand Islands. The mountainous backbone of the country lies nearer the eastern than the western coast, and the ocean cliffs on the Pacific are hundreds and in some places thousands of feet in height. The wider, more fertile plains lie on the western slopes, and it is here that we shall find the richest farming land, the largest cities, and the best harbors.

Many people think of their country as the most beautiful in the world, even though to strangers it may seem dreary and uninteresting. The Koreans, however, have good reason for believing their land one of the loveliest on earth. It has green hills, beautiful valleys, mountains full of minerals, broad, fertile plains, a good rainfall, and a delightful climate, and under Japanese direction there is no reason why it should not become one of the most productive regions of Asia.

We will land at Chemulpo, the port of Seoul, the capital. Korea has changed in many ways in recent years, and especially since Japan took possession of it. Chemulpo has grown from a little fishing village to an important seaport with wide streets, good shops, a maze of telephone and telegraph wires, and a train service to Seoul.

Look at the white-robed people! What quantities of laundry work must be done to keep the garments fit to wear. The women wash the clothes in the brooks and dry them on stones. You would smile to see the way in which

they do the ironing. Before they wash the garments they rip them apart, and after the clothes are thoroughly washed they wind them carefully around a large, smooth stick. This is placed on the ground and two women beat it with



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FIG. 171. THERE ARE CURIOUS COSTUMES ON THE STREETS

clubs until the cloth is dried and polished nearly as well as if done in one of our city laundries.

What a curious-looking hat that man is wearing! It is like a small, half-opened umbrella. He is in mourning and that is his mourning hat, which he must wear for three

years if he would show proper respect for the dead. There is another man wearing a small black hat which looks like a piece of stovepipe perched on the top of his head and tied on by ribbons under his chin. His hat and the long, full sleeves of his white garment tell us that he is a wealthy man and not obliged to work. It is hard to tell whether these people coming down the street are women or men. Their hair is parted and worn in braids down their backs. They are men, and because they are unmarried they are not allowed to wear hats or to arrange their hair as the married men do, in a knot on the top of the head. There are other curious costumes on the streets, and a person well acquainted in the country can tell at a glance, from the dress which a Korean wears, what is his station in life and his occupation.

We will take the train for Seoul, a two hours' ride from Chemulpo. We could go in a jinrikisha with two stout coolies to pull us, but our bones would ache before we arrived at the capital. There are no good roads in Korea. The one between Chemulpo and Seoul is perhaps the best, but even this is only a rut worn by the feet of coolies, or a track between low rice fields.

Seoul is a city about the size of Atlanta, Georgia. Let us see if we can picture to ourselves what this Korean city is like. Imagine a large city surrounded by high walls in which are eight massive gates, each one ornamented with rows of queer figures somewhat resembling monkeys. These are placed on the walls to frighten away evil spirits and so protect the people of the city. All the houses are low, one-story buildings with tiled or straw-thatched roofs. The streets are narrow, crooked, and dirty, bordered by low



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FIG. 172. THE HOUSES OF SEOUL ARE LOW ONE-STORY BUILDINGS

open shops and thronged by white-robed men with hats of every conceivable shape or with no hats at all. Some are carrying dried fish and others have buckets of water hung on a yoke which rests on the back and is held in place by straps over the shoulders. Bullocks loaded with wood

and grass crowd the passers-by, and little horses not much larger than ponies are almost hidden under heavy packs.

While the people are getting their meals the city is so filled with smoke that our eyes smart and our throats ache.



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FIG. 173. MANY OF THE HOUSES OF SEOUL HAVE THATCHED ROOFS

The fuel is chiefly straw and brush, and the little chimneys which extend a few feet from the sides of the houses are all belching clouds of smoke. The houses are heated in a curious way. The floors are of stone or cement with flues connecting with the fireplace running underneath.

Whenever the fire is lighted, the floor is warmed, consequently no one in Korea suffers from cold feet, or, since they sleep on the floor, from a cold bed.

Since the Japanese occupation of Korea some of the streets of Seoul have been widened, telephones, telegraphs,

and electric cars have been introduced in parts of the city, and many modern buildings have been erected, so that there are portions which, if it were not for the white-robed people, would be very much more like the cities with which we are familiar than the parts which I have described.



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FIG. 174. THERE ARE BULLOCKS LOADED WITH WOOD

Some of the country scenes are as interesting as those in the city. There are quantities of lumber in the

great forests, and stores of minerals in the mountains, yet these resources are as yet little developed. Most of the people are farmers, and, as in China and Japan, rice is one of the principal crops. One writer says that rice is to the Korean what roast beef is to the Englishman, macaroni to the Italian, and potatoes to the Irishman. In a trip through the country we shall see dignified Koreans in flowing white

robes working in the rice fields with bullocks attached to the little homemade plows; on the hillsides boys are scraping up the dry grass with queer bamboo rakes, while others are loading the patient pony for the trip to the city, where the grass will be sold for fuel.

See the women washing in the river! The laundry work keeps them busy most of the time, for the white clothing soils very quickly. These washerwomen are of the lower class. Few women of the more well-to-do people appear in public, and those who do are careful to keep their faces veiled.

Here we are at the entrance of a little village. That pile of logs at the end of the main street is a tiger trap. There are many tigers in some parts of Korea, and they often wander into the villages, to find a good meal in the shape of a lean black pig. Pigs are very numerous, and we see many of them here in the village, wandering through the streets and in and out of the houses at will.

The Korean is very hospitable, and though his hut may be mean, we shall be invited to enter and share his best. With the resources of his country there is no reason why he should not make rapid progress now that his eyes and mind are being opened to new and better ways of life.



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FIG. 175. WE SEE DIGNIFIED KOREANS IN FLOWING WHITE ROBES, WORKING IN THE RICE FIELDS WITH BULLOCKS ATTACHED TO HOMEMADE PLOWS

## TOPICS FOR STUDY

## I

1. Size of Korea and Formosa.
2. Former condition of Formosa.
3. Improvements in the island.
4. Resources and products.
5. Camphor and camphor forests.
6. Shape and surface of Korea.
7. The port of Chemulpo.
8. Seoul, the capital.
9. Country life in Korea.

## II

1. How far is Formosa from the Philippine Islands? from the United States?
2. Read Chapter VII again and tell how Japan obtained the island of Formosa.
3. Tell the advantages to Japan of the ownership of Formosa.
4. Do you know any products besides camphor which owe their origin to the skill of German chemists?
5. How did Japan obtain Korea?
6. Why are the cities of Korea on the western coast?
7. If you have an encyclopedia at home, read what it says about Korea and tell the class about it.
8. Locate the Yalu River and tell the reason for its importance. What industry near the Yalu River is spoken of on page 123?

## III

Be able to spell and pronounce the following names. Locate each place and tell what was said of it in the chapter.

Yalu River  
Seoul  
Chemulpo

Atlanta  
Florida  
Formosa



## REVIEW QUESTIONS

1. Name all the ways in which Asia excels the other continents.
2. Make a list, in the order of their size, of the twenty-five largest rivers of the world. Locate each one. How many of them are in Asia?
3. Of what does the British empire consist? the Russian empire? the Chinese republic? Which is the largest? Which contains the most people?
4. What is the population of the world? What fractional part live in Europe? in Asia? in North America? in the Chinese republic? in India?
5. Make a list of the countries whose chief food product is rice; millet; wheat.
6. Make a list of the chief countries of each continent. Write beside each one a product or some products for which it is especially noted.
7. On a map of Asia show the countries, rivers, mountains, seas, gulfs, bays, peninsulas, fifteen cities, and two railroads.
8. What are monsoons? Over what countries do they blow? What effect do they have?
9. Name some deserts in Asia. Account for the lack of rainfall in these regions.
10. Name and locate two important mountain passes in Asia. Give the reasons for their importance.
11. What are the five largest cities in Asia? Beside each one write the name of a city in Europe and one in America of about the same size.
12. Write a list of the ways in which the capital of the United States and the capital of China differ.
13. In which country of Asia would you least like to live? In which would you prefer to live? Give the reasons for your answers.
14. Color a map of Asia to show the Russian and the English possessions. How much of the continent do they occupy?
15. Look in your textbook and see to what scale the map of Asia is drawn; the map of Europe. What does the scale tell you about the size of the two continents? From the figures given in the tables in your textbooks compare the areas.
16. When it is noontime in the United States, what time is it in the Chinese republic? Why is the time different in the two places?

17. Which city has the longer summer day, Irkutsk or Bangkok? Can you tell the reason?

18. Write the name of a city in each country of Asia. On what water is it situated? For what is it important?

19. Make a list of the cities of Asia which have a population of more than two hundred thousand: Make a similar list of cities in the United States. Compare the number in the two lists. Make a list of the cities in each continent which have a population of more than a million. Locate all the places in each list.

20. Make a list of the chief products which are raised in both the United States and Asia.

21. Name some gems and precious stones found in Asia. Tell the country from which they come.

22. Name the countries of the world most noted for the production of rubber, cotton, wheat, and sugar.

23. Name ten great seaports of the world. Locate them.

24. Name a country and, if possible, a city noted for the following products: rice, dairy products, tea, rugs, silk, dates, licorice, opium, cinnamon, tin, pepper, furs, lumber, figs, oranges, teakwood, coconuts, cotton, fans, camphor, wheat, millet, shawls, porcelain and china, quinine, embroideries, pearls, coffee, rubber, ivory.

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